LEARNING POWER BI PART V

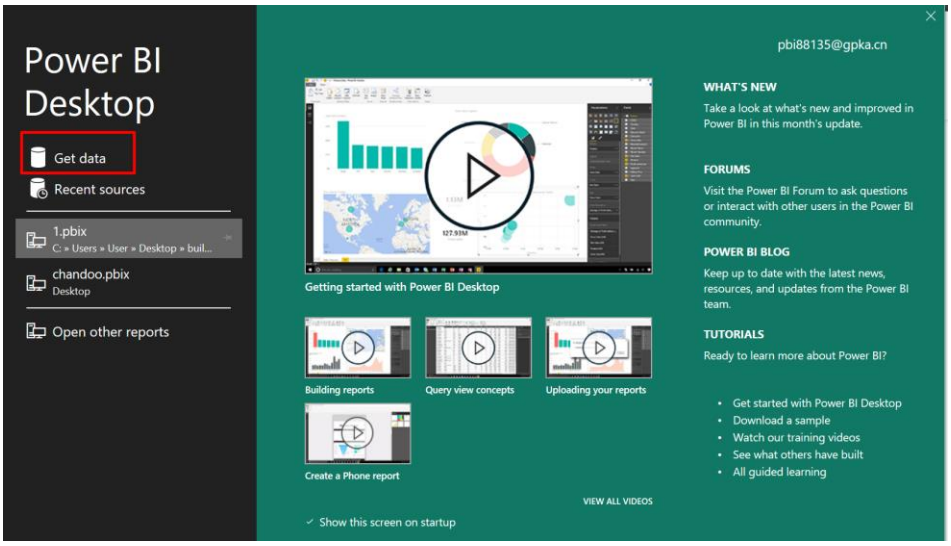
DAX

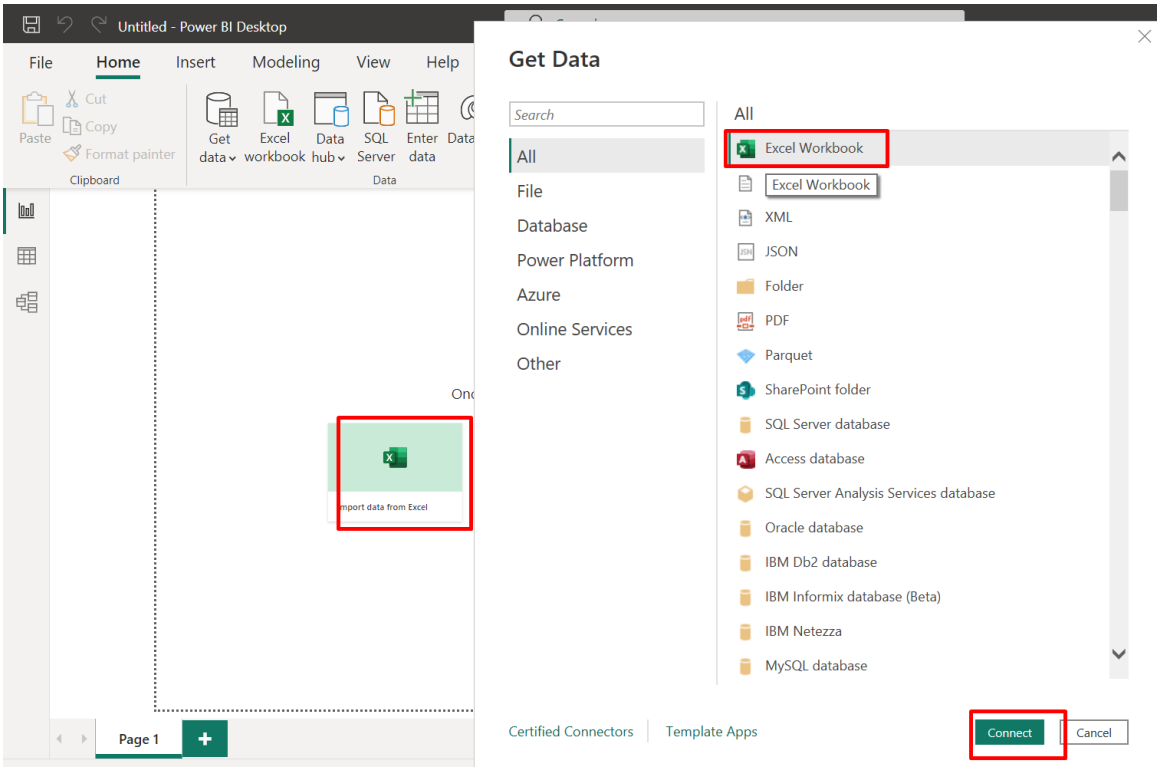
DR. ALVIN ANG

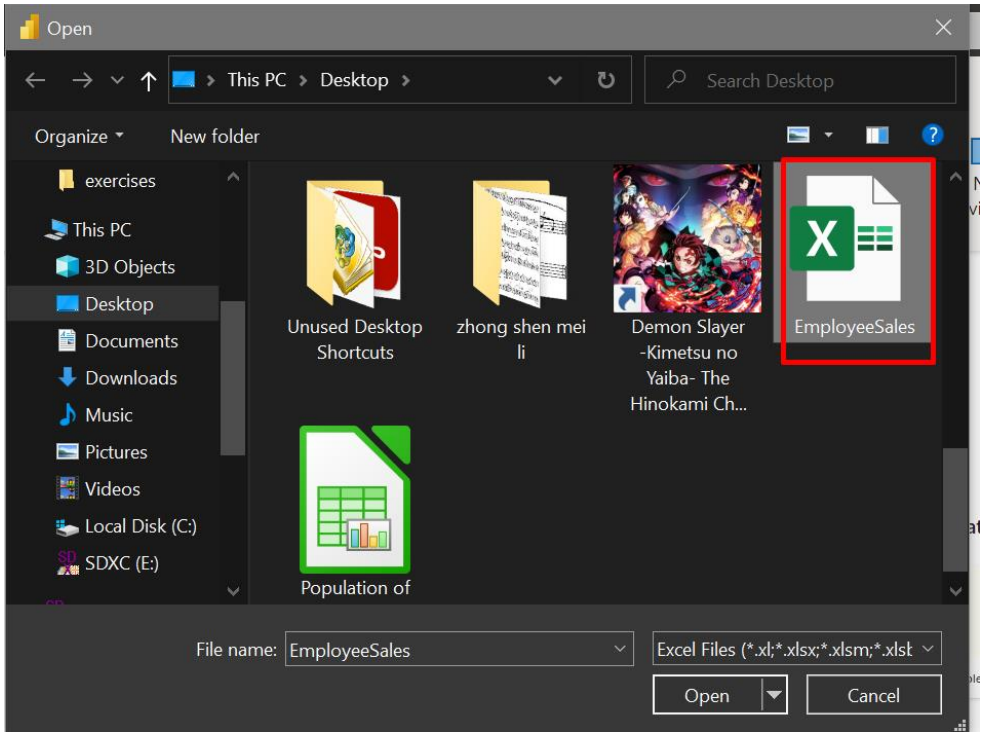
CONTENTS

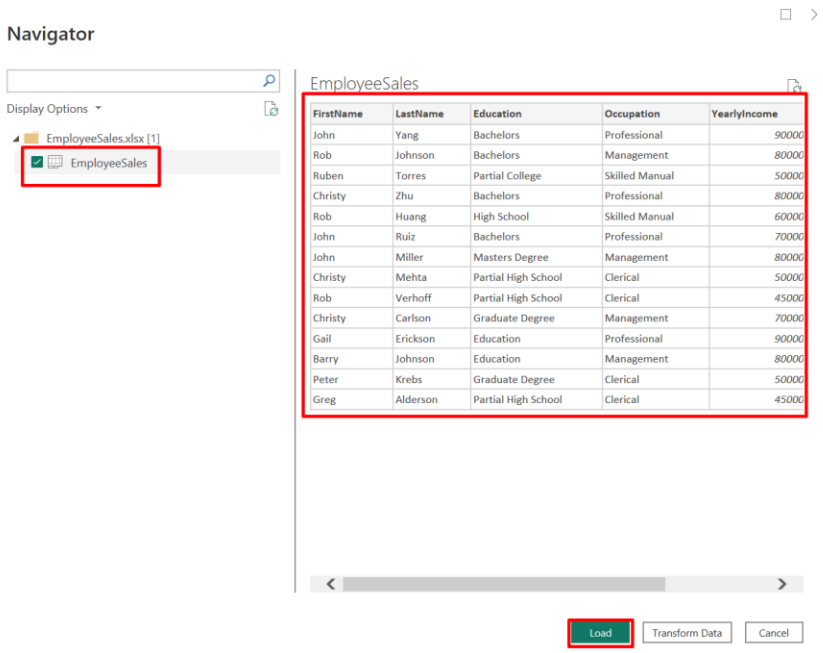
I. GET DATA

https://www.alvinang.sg/s/EmployeeSales.xlsx





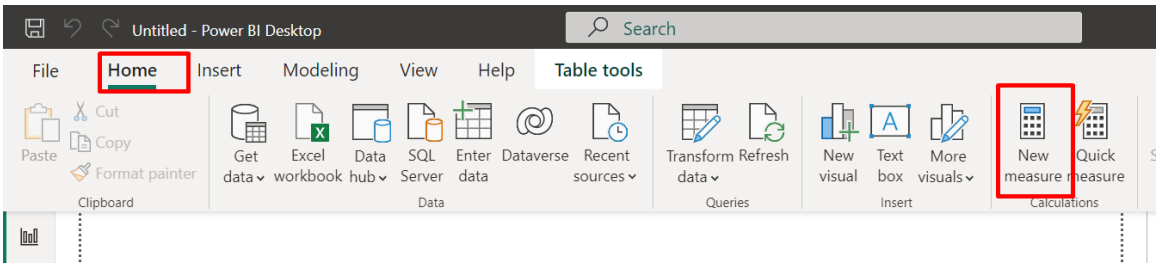


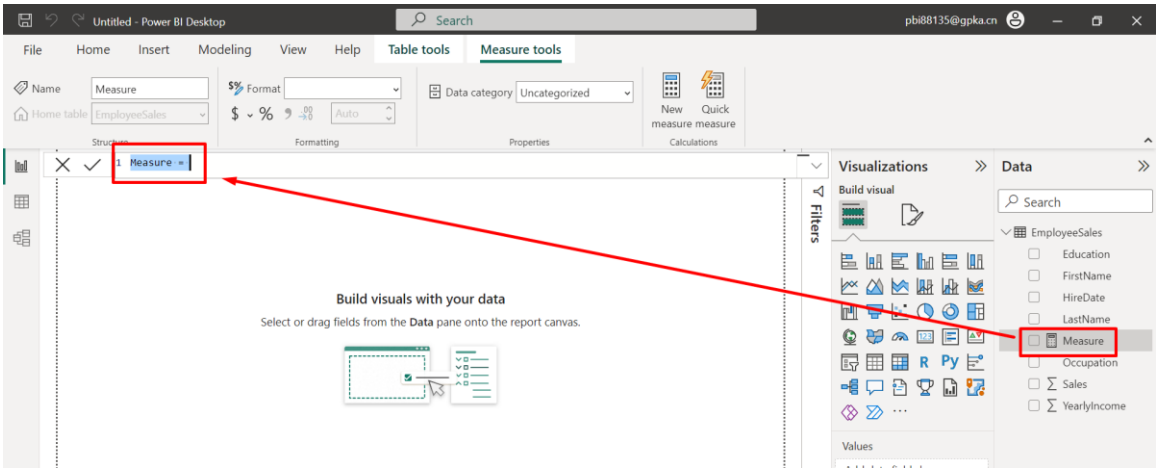


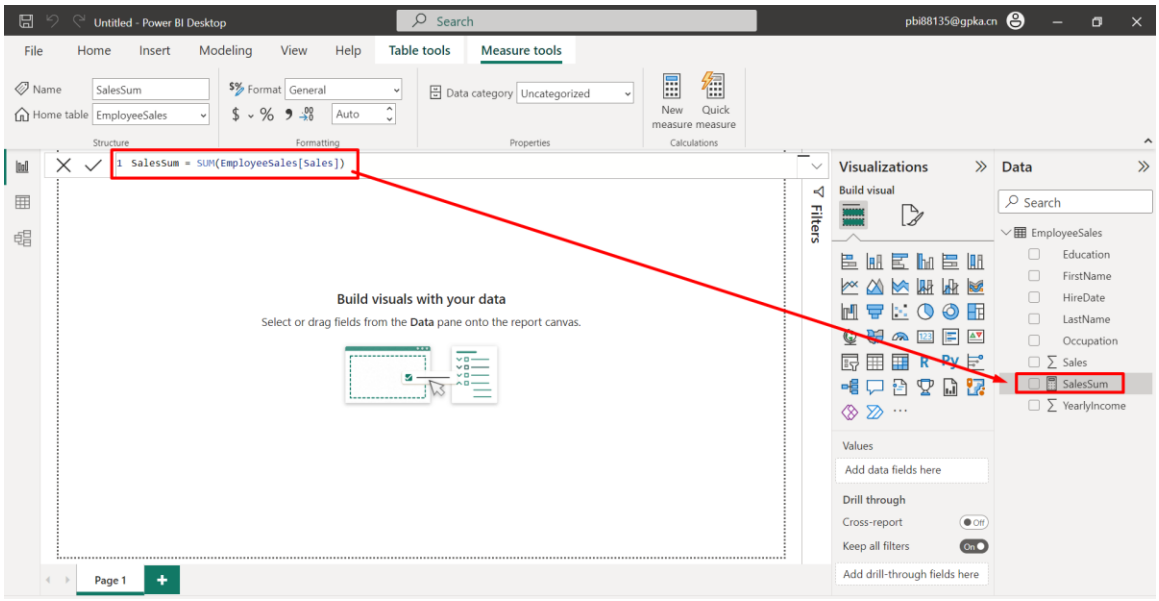
FirstName	LastName	Education	Occupation	YearlyIncome
John	Yang	Bachelors	Professional	90000
Rob	Johnson	Bachelors	Management	80000
Ruben	Torres	Partial College	Skilled Manual	50000
Christy	Zhu	Bachelors	Professional	80000
Rob	Huang	High School	Skilled Manual	60000
John	Ruiz	Bachelors	Professional	70000
John	Miller	Masters Degree	Management	80000
Christy	Mehta	Partial High School	Clerical	50000
Rob	Verhoff	Partial High School	Clerical	45000
Christy	Carlson	Graduate Degree	Management	70000
Gail	Erickson	Education	Professional	90000
Barry	Johnson	Education	Management	80000
Peter	Krebs	Graduate Degree	Clerical	50000
Greg	Alderson	Partial High School	Clerical	45000

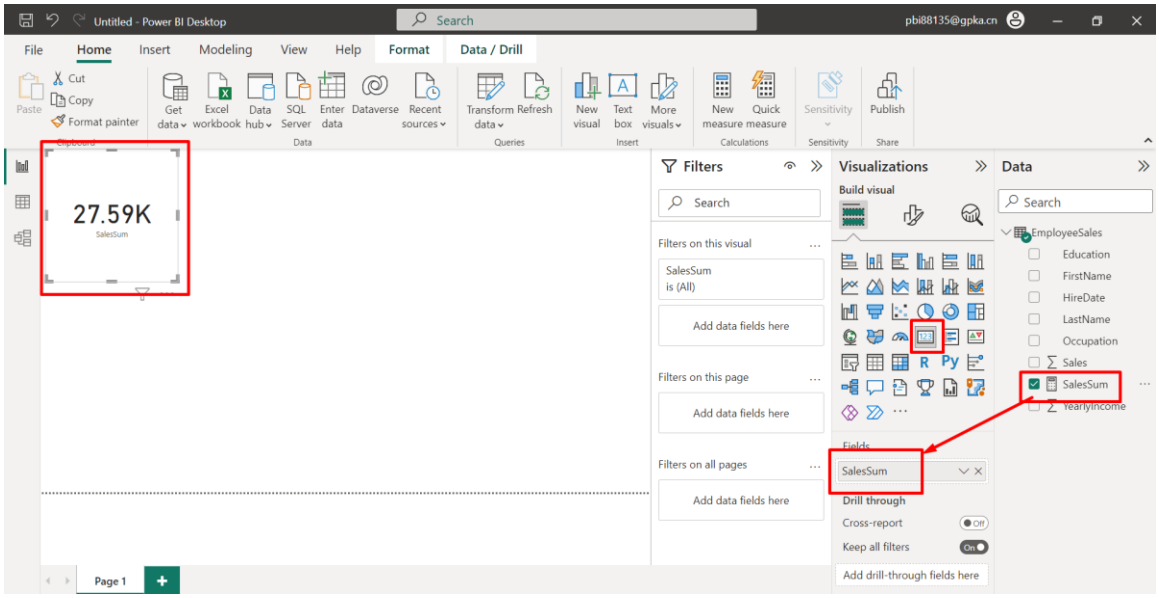
A. DAX SUM

SalesSum = SUM(EmployeeSales[Sales])



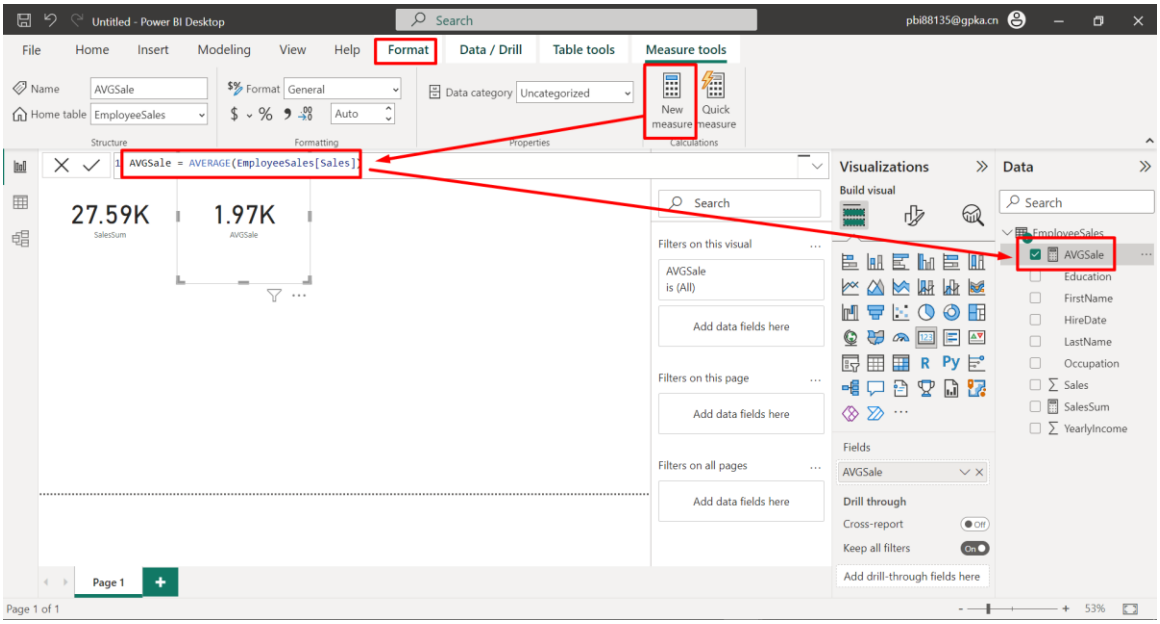


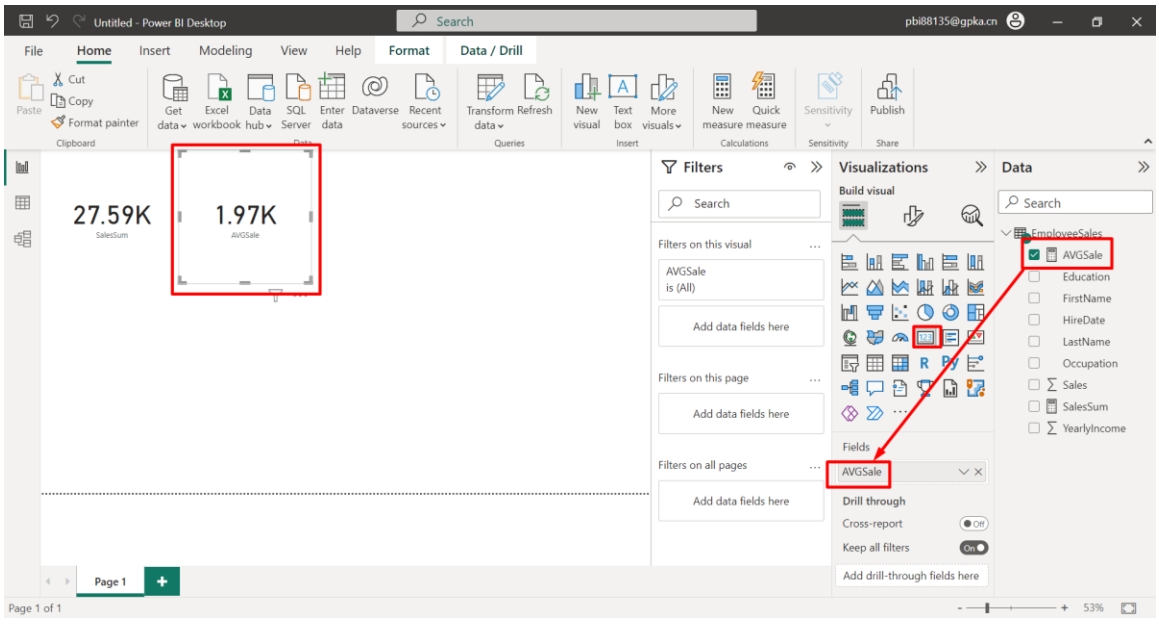




B. DAX AVERAGE

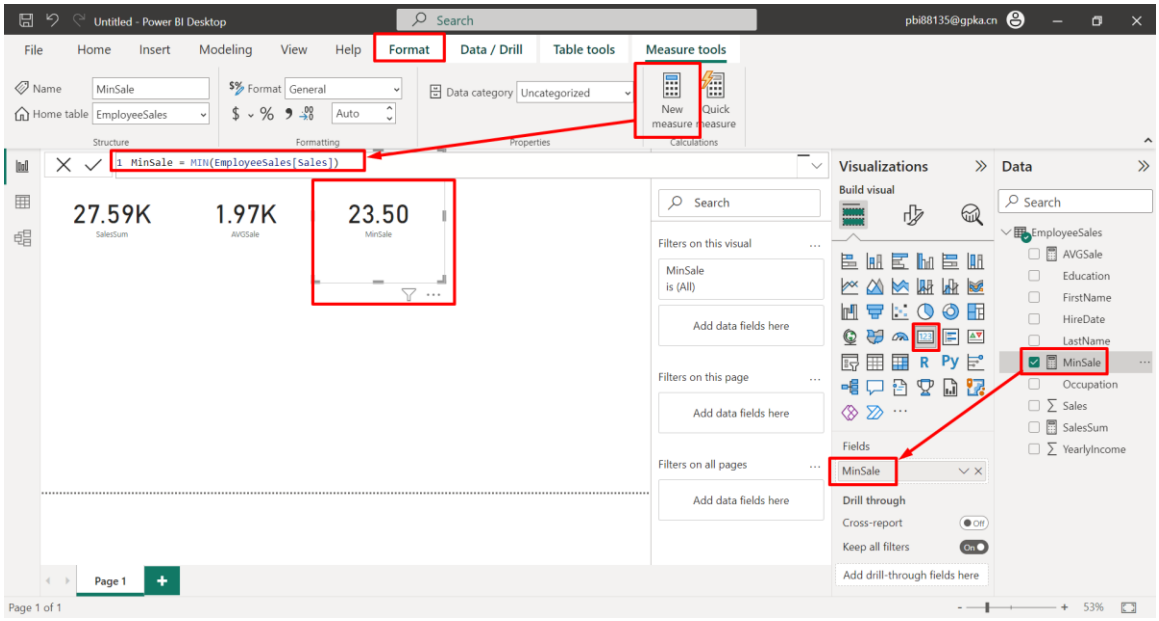
AVGSale = AVERAGE(EmployeeSales[Sales])

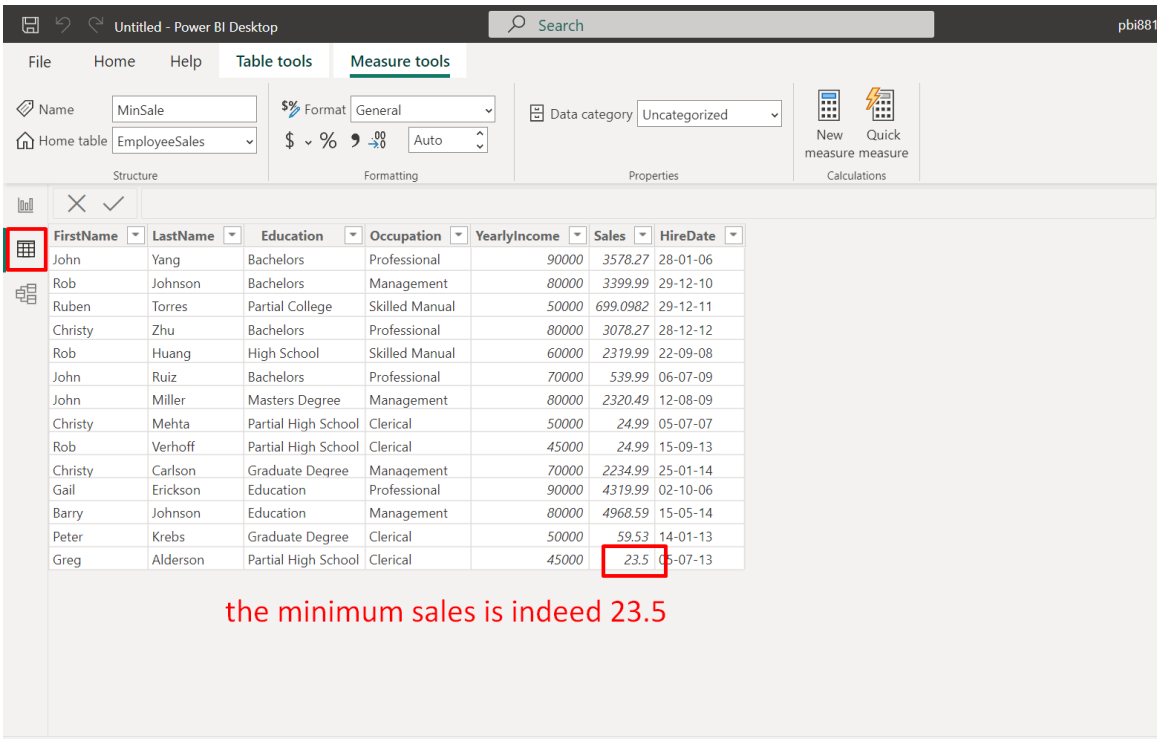




C. DAX MIN

MinSale = MIN(EmployeeSales[Sales])



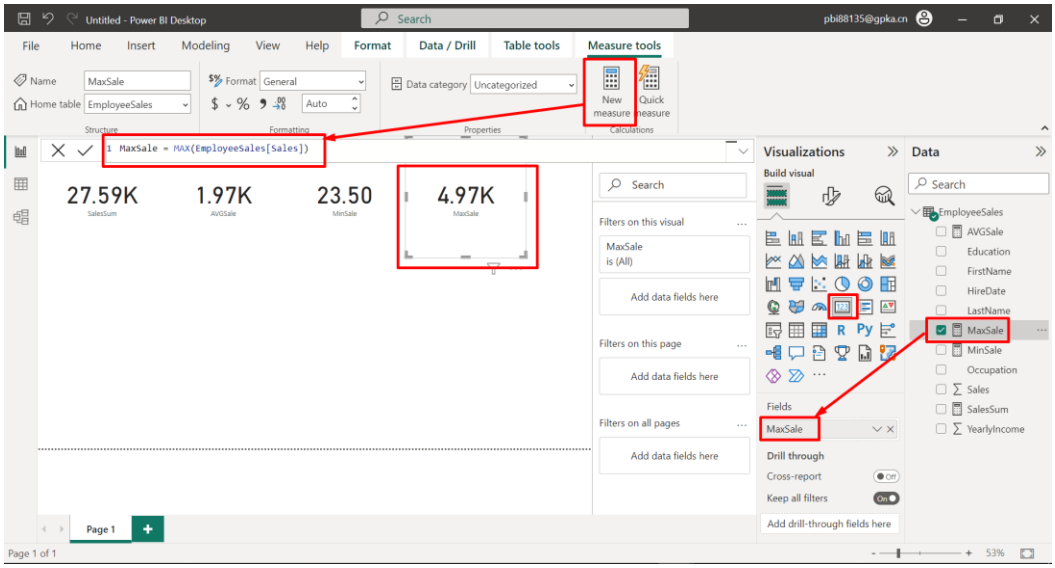


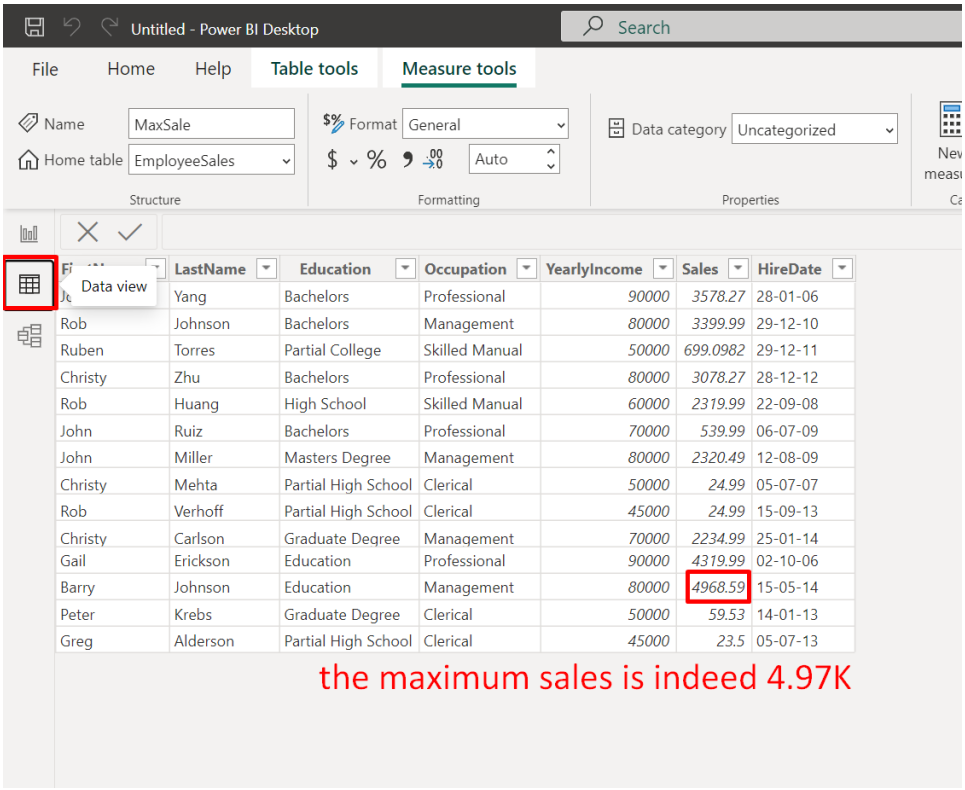
FirstName	LastName	Education	Occupation	YearlyIncome	Sales	HireDate
John	Yang	Bachelors	Professional	90000	3578.27	28-01-06
Rob	Johnson	Bachelors	Management	80000	3399.99	29-12-10
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	29-12-11
Christy	Zhu	Bachelors	Professional	80000	3078.27	28-12-12
Rob	Huang	High School	Skilled Manual	60000	2319.99	22-09-08
John	Ruiz	Bachelors	Professional	70000	539.99	06-07-09
John	Miller	Masters Degree	Management	80000	2320.49	12-08-09
Christy	Mehta	Partial High School	Clerical	50000	24.99	05-07-07
Rob	Verhoff	Partial High School	Clerical	45000	24.99	15-09-13
Christy	Carlson	Graduate Degree	Management	70000	2234.99	25-01-14
Gail	Erickson	Education	Professional	90000	4319.99	02-10-06
Barry	Johnson	Education	Management	80000	4968.59	15-05-14
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	14-01-13
Greg	Alderson	Partial High School	Clerical	45000	23.5	05-07-13

the minimum sales is indeed 23.5

D. DAX MAX

MaxSale = MAX(EmployeeSales[Sales])



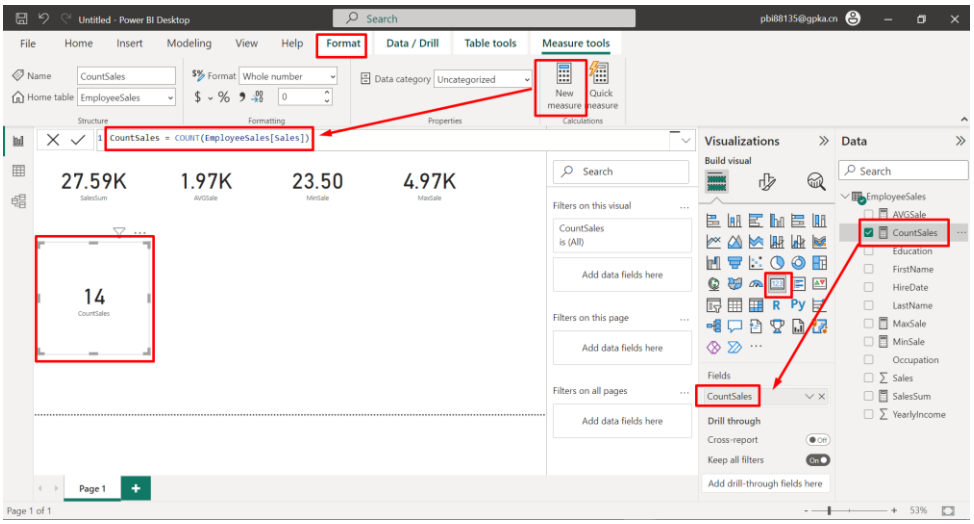


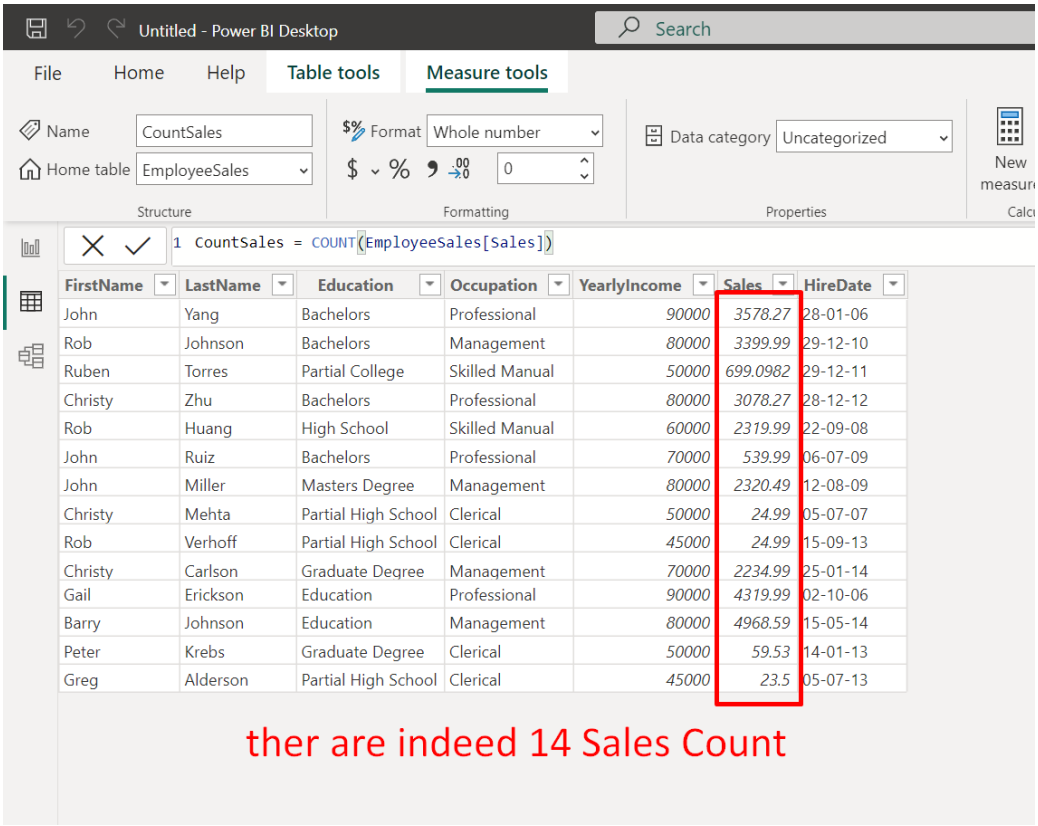
LastName	Education	Occupation	YearlyIncome	Sales	HireDate
Yang	Bachelors	Professional	90000	3578.27	28-01-06
Johnson	Bachelors	Management	80000	3399.99	29-12-10
Torres	Partial College	Skilled Manual	50000	699.0982	29-12-11
Zhu	Bachelors	Professional	80000	3078.27	28-12-12
Huang	High School	Skilled Manual	60000	2319.99	22-09-08
Ruiz	Bachelors	Professional	70000	539.99	06-07-09
Miller	Masters Degree	Management	80000	2320.49	12-08-09
Mehta	Partial High School	Clerical	50000	24.99	05-07-07
Verhoff	Partial High School	Clerical	45000	24.99	15-09-13
Carlson	Graduate Degree	Management	70000	2234.99	25-01-14
Erickson	Education	Professional	90000	4319.99	02-10-06
Johnson	Education	Management	80000	4968.59	15-05-14
Krebs	Graduate Degree	Clerical	50000	59.53	14-01-13
Alderson	Partial High School	Clerical	45000	23.5	05-07-13

the maximum sales is indeed 4.97K

E. DAX COUNT

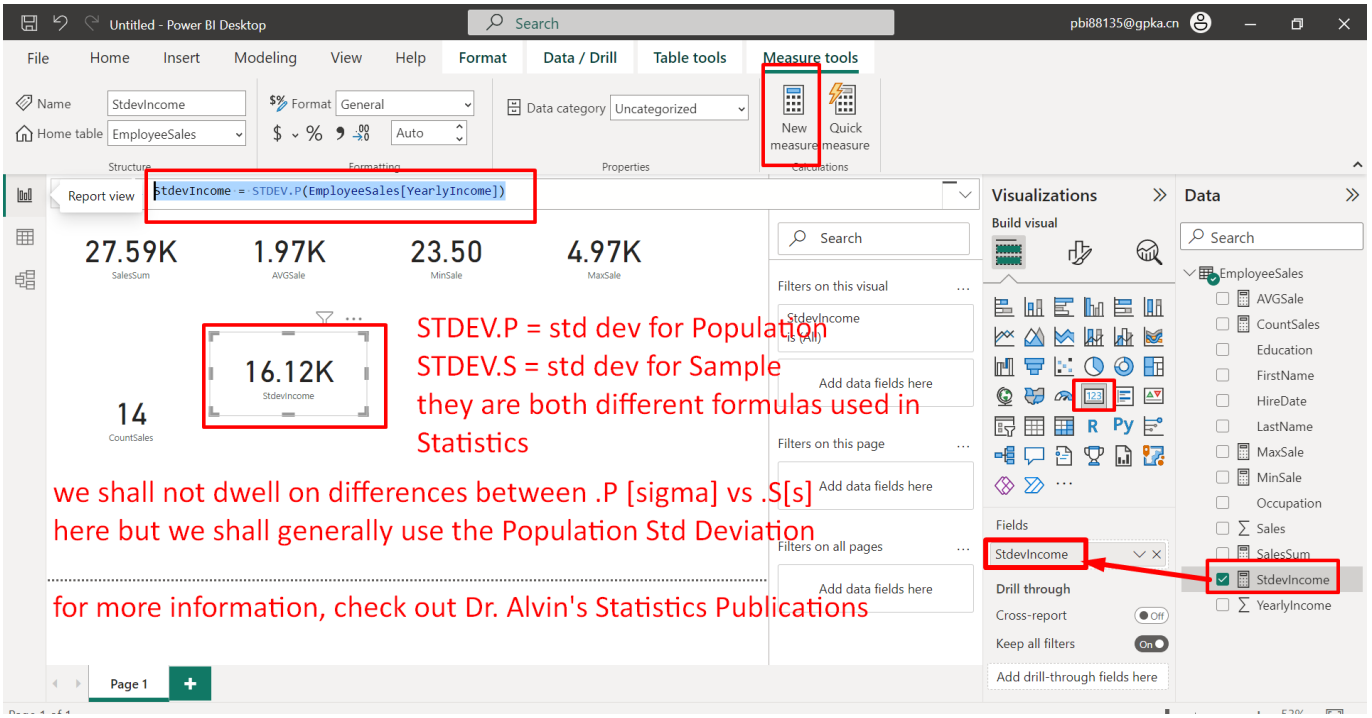
CountSales = COUNT(EmployeeSales[Sales])





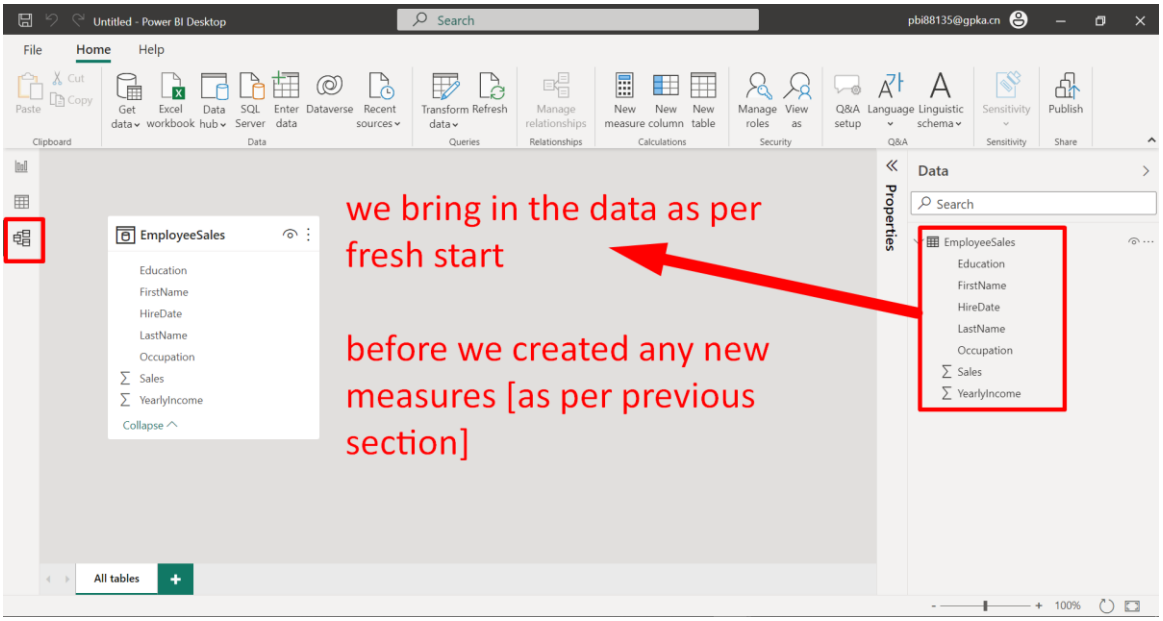
F. DAX STANDARD DEVIATION

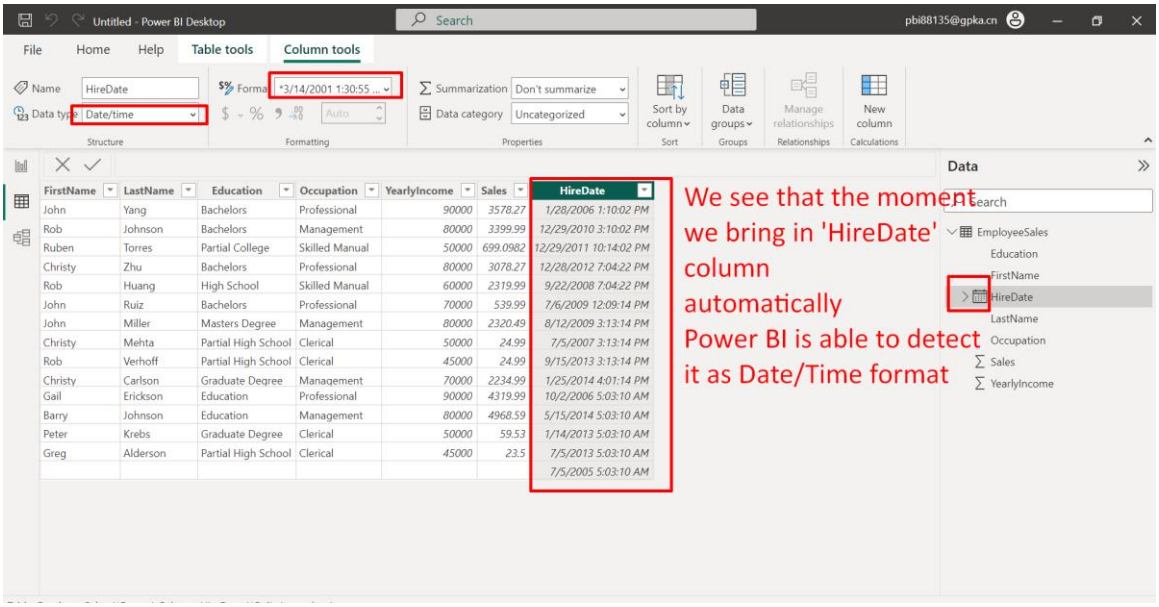
StdevSIncome = STDEV.P(EmployeeSales[YearlyIncome])



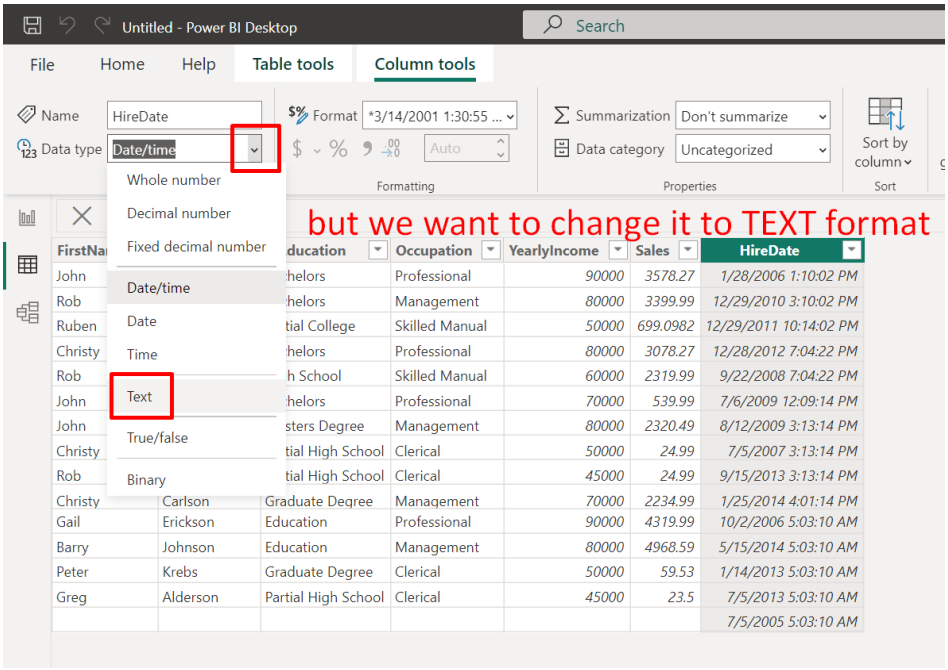
https://www.alvinang.sg/s/EmployeeSales.xlsx

A. BRING IN THE DATA FROM A FRESH NEW START



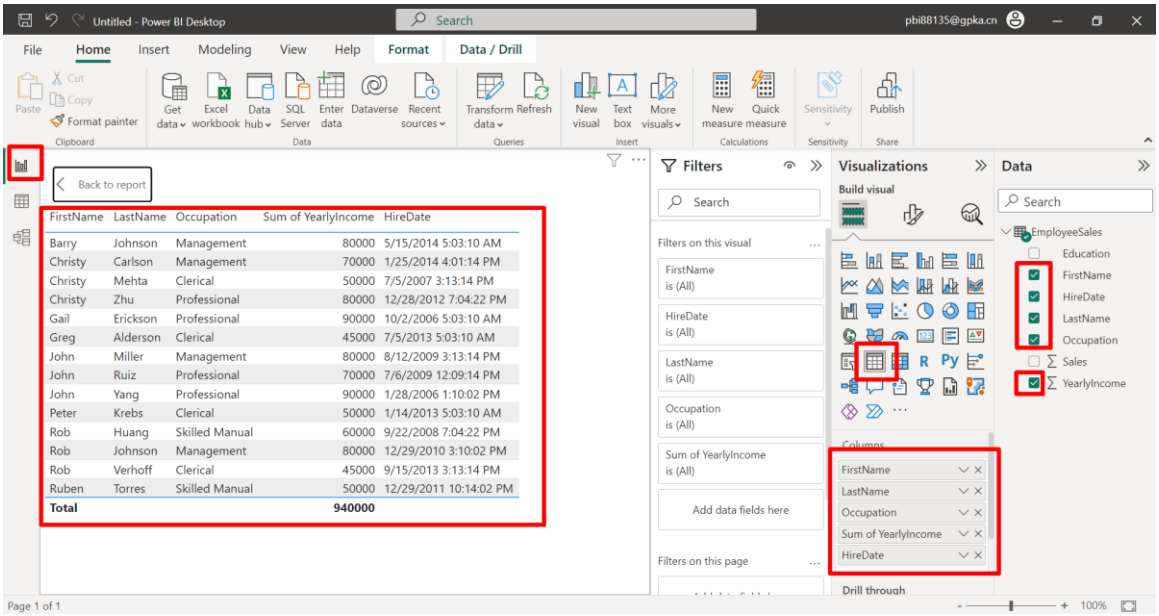


B. CHANGE TO TEXT FORMAT



FirstNa		ducation	Occupation	YearlyIncome	Sales	HireDate
John		helors	Professional	90000	3578.27	1/28/2006 1:10:02 PM
Rob		helors	Management	80000	3399.99	12/29/2010 3:10:02 PM
Ruben		tial College	Skilled Manual	50000	699.0982	12/29/2011 10:14:02 PM
Christy		helors	Professional	80000	3078.27	12/28/2012 7:04:22 PM
Rob		h School	Skilled Manual	60000	2319.99	9/22/2008 7:04:22 PM
John		helors	Professional	70000	539.99	7/6/2009 12:09:14 PM
John		sters Degree	Management	80000	2320.49	8/12/2009 3:13:14 PM
Christy		tial High School	Clerical	50000	24.99	7/5/2007 3:13:14 PM
Rob		tial High School	Clerical	45000	24.99	9/15/2013 3:13:14 PM
Christy	Carlson	Graduate Degree	Management	70000	2234.99	1/25/2014 4:01:14 PM
Gail	Erickson	Education	Professional	90000	4319.99	10/2/2006 5:03:10 AM
Barry	Johnson	Education	Management	80000	4968.59	5/15/2014 5:03:10 AM
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	1/14/2013 5:03:10 AM
Greg	Alderson	Partial High School	Clerical	45000	23.5	7/5/2013 5:03:10 AM
						7/5/2005 5:03:10 AM

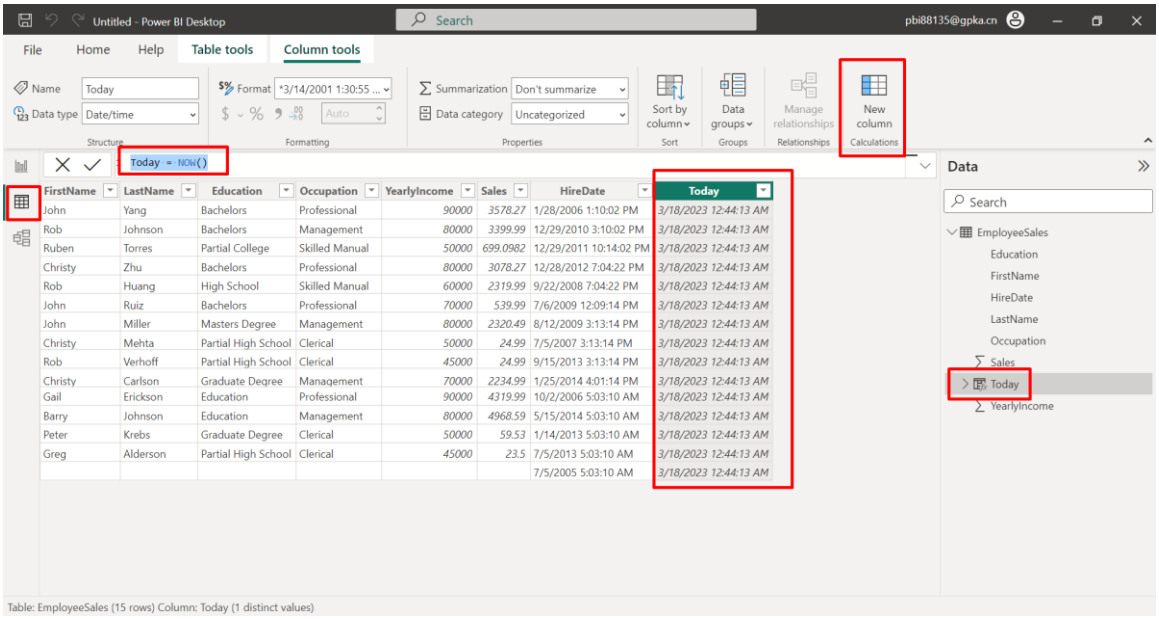
C. CREATE A TABLE

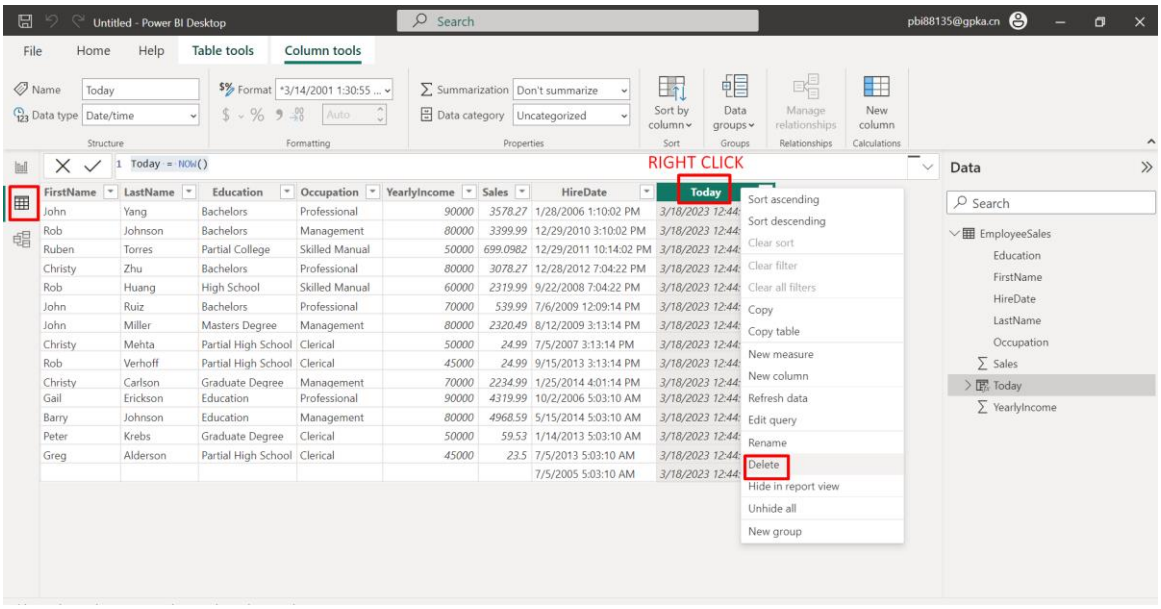


FirstName	LastName	Occupation	Sum of YearlyIncome	HireDate
Barry	Johnson	Management	80000	5/15/2014 5:03:10 AM
Christy	Carlson	Management	70000	1/25/2014 4:01:14 PM
Christy	Mehta	Clerical	50000	7/5/2007 3:13:14 PM
Christy	Zhu	Professional	80000	12/28/2012 7:04:22 PM
Gail	Erickson	Professional	90000	10/2/2006 5:03:10 AM
Greg	Alderson	Clerical	45000	7/5/2013 5:03:10 AM
John	Miller	Management	80000	8/12/2009 3:13:14 PM
John	Ruiz	Professional	70000	7/6/2009 12:09:14 PM
John	Yang	Professional	90000	1/28/2006 1:10:02 PM
Peter	Krebs	Clerical	50000	1/14/2013 5:03:10 AM
Rob	Huang	Skilled Manual	60000	9/22/2008 7:04:22 PM
Rob	Johnson	Management	80000	12/29/2010 3:10:02 PM
Rob	Verhoff	Clerical	45000	9/15/2013 3:13:14 PM
Ruben	Torres	Skilled Manual	50000	12/29/2011 10:14:02 PM
Total			**940000**	

D. DAX NOW()

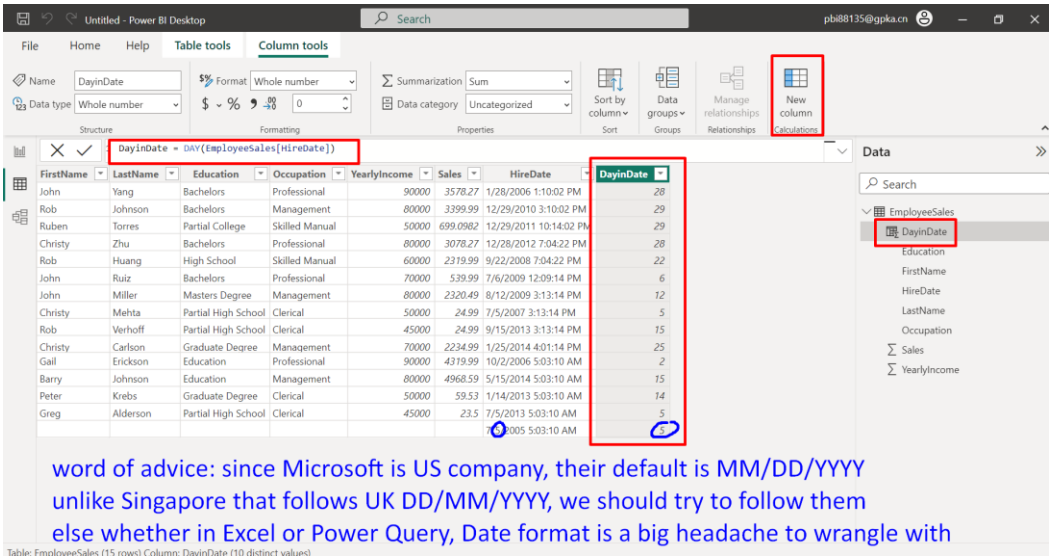
Today = NOW()





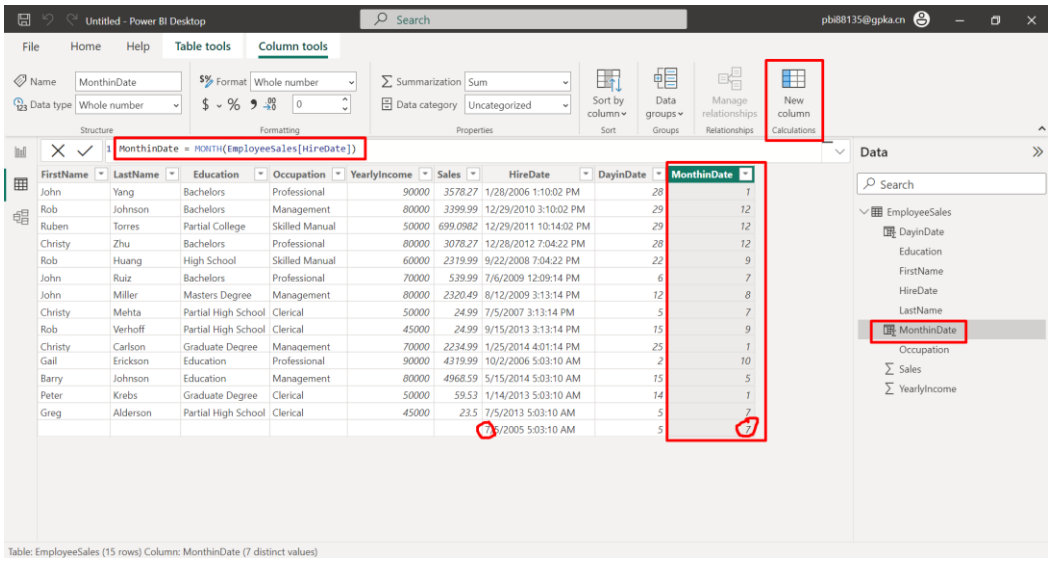
E. DAX DAY()

DayinDate = DAY(EmployeeSales[HireDate])



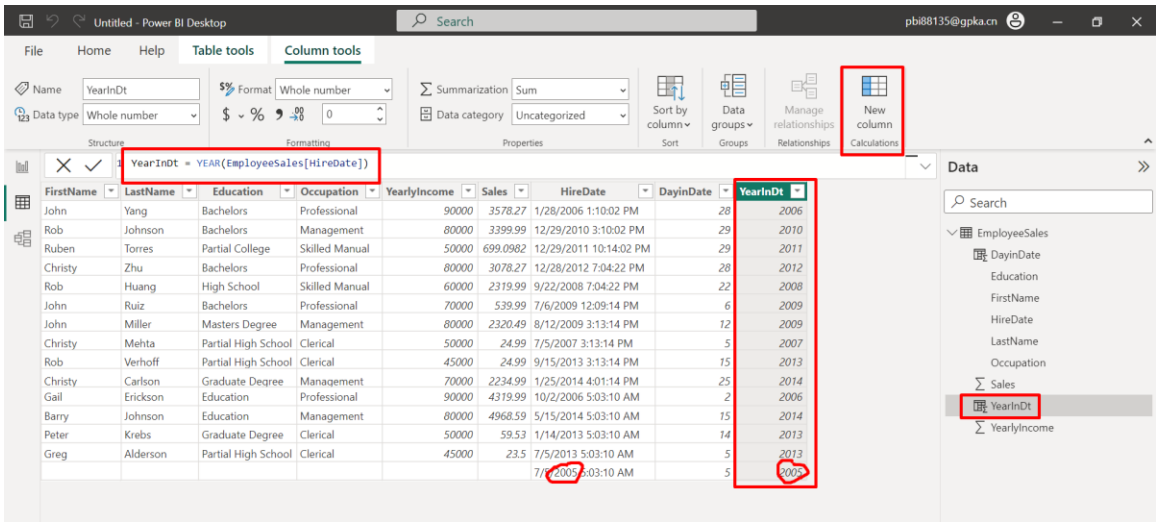
F. DAX MONTH()

MonthinDate = MONTH(EmployeeSales[HireDate])



G. DAX YEAR()

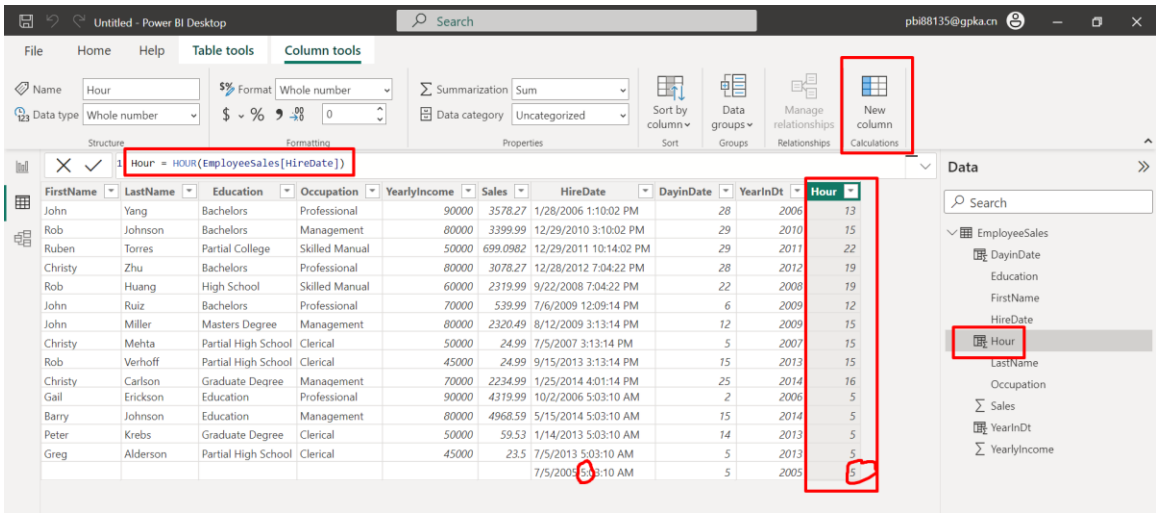
YearInDt = YEAR(EmployeeSales[HireDate])



FirstName	LastName	Education	Occupation	YearlyIncome	Sales	HireDate	DayinDate	YearInDt
John	Yang	Bachelors	Professional	90000	3578.27	1/28/2006 1:10:02 PM	28	2006
Rob	Johnson	Bachelors	Management	80000	3399.99	12/29/2010 3:10:02 PM	29	2010
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	12/29/2011 10:14:02 PM	29	2011
Christy	Zhu	Bachelors	Professional	80000	3078.27	12/28/2012 7:04:22 PM	28	2012
Rob	Huang	High School	Skilled Manual	60000	2319.99	9/22/2008 7:04:22 PM	22	2008
John	Ruiz	Bachelors	Professional	70000	539.99	7/6/2009 12:09:14 PM	6	2009
John	Miller	Masters Degree	Management	80000	2320.49	8/12/2009 3:13:14 PM	12	2009
Christy	Mehta	Partial High School	Clerical	50000	24.99	7/5/2007 3:13:14 PM	5	2007
Rob	Verhoff	Partial High School	Clerical	45000	24.99	9/15/2013 3:13:14 PM	15	2013
Christy	Carlson	Graduate Degree	Management	70000	2234.99	1/25/2014 4:01:14 PM	25	2014
Gail	Erickson	Education	Professional	90000	4319.99	10/2/2006 5:03:10 AM	2	2006
Barry	Johnson	Education	Management	80000	4968.59	5/15/2014 5:03:10 AM	15	2014
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	1/14/2013 5:03:10 AM	14	2013
Greg	Alderson	Partial High School	Clerical	45000	23.5	7/5/2013 5:03:10 AM	5	2013
						7/5/2005 5:03:10 AM	5	2005

H. DAX HOUR()

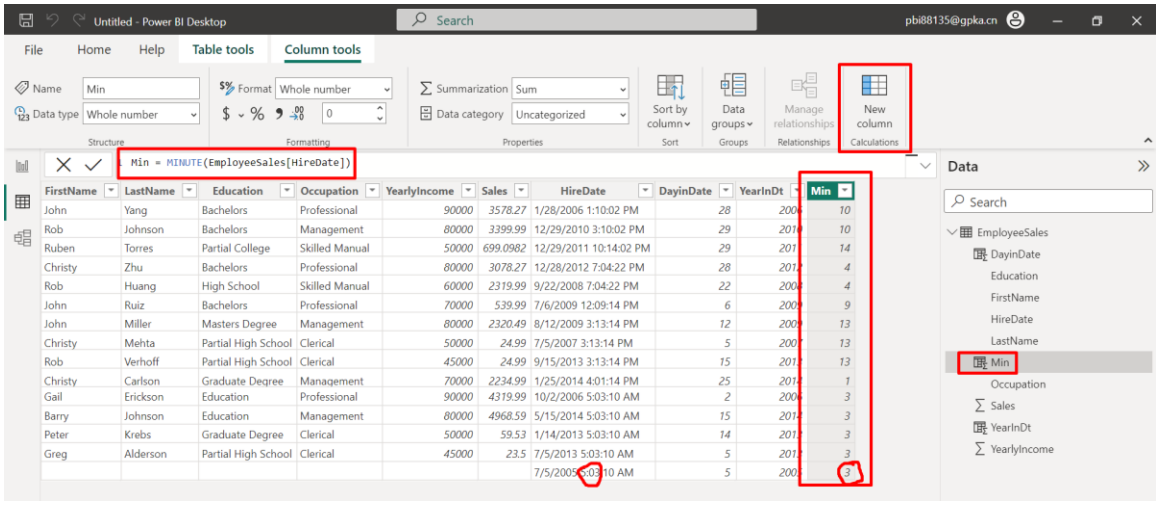
Hour = HOUR(EmployeeSales[HireDate])



FirstName	LastName	Education	Occupation	YearlyIncome	Sales	HireDate	DayinDate	YearInDt	Hour
John	Yang	Bachelors	Professional	90000	3578.27	1/28/2006 1:10:02 PM	28	2006	13
Rob	Johnson	Bachelors	Management	80000	3399.99	12/29/2010 3:10:02 PM	29	2010	15
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	12/29/2011 10:14:02 PM	29	2011	22
Christy	Zhu	Bachelors	Professional	80000	3078.27	12/28/2012 7:04:22 PM	28	2012	19
Rob	Huang	High School	Skilled Manual	60000	2319.99	9/22/2008 7:04:22 PM	22	2008	19
John	Ruiz	Bachelors	Professional	70000	539.99	7/6/2009 12:09:14 PM	6	2009	12
John	Miller	Masters Degree	Management	80000	2320.49	8/12/2009 3:13:14 PM	12	2009	15
Christy	Mehta	Partial High School	Clerical	50000	24.99	7/5/2007 3:13:14 PM	5	2007	15
Rob	Verhoff	Partial High School	Clerical	45000	24.99	9/15/2013 3:13:14 PM	15	2013	15
Christy	Carlson	Graduate Degree	Management	70000	2234.99	1/25/2014 4:01:14 PM	25	2014	16
Gail	Erickson	Education	Professional	90000	4319.99	10/2/2006 5:03:10 AM	2	2006	5
Barry	Johnson	Education	Management	80000	4968.59	5/15/2014 5:03:10 AM	15	2014	5
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	1/14/2013 5:03:10 AM	14	2013	5
Greg	Alderson	Partial High School	Clerical	45000	23.5	7/5/2013 5:03:10 AM	5	2013	5
						7/5/2005 5:03:10 AM	5	2005	5

I. DAX MINUTE()

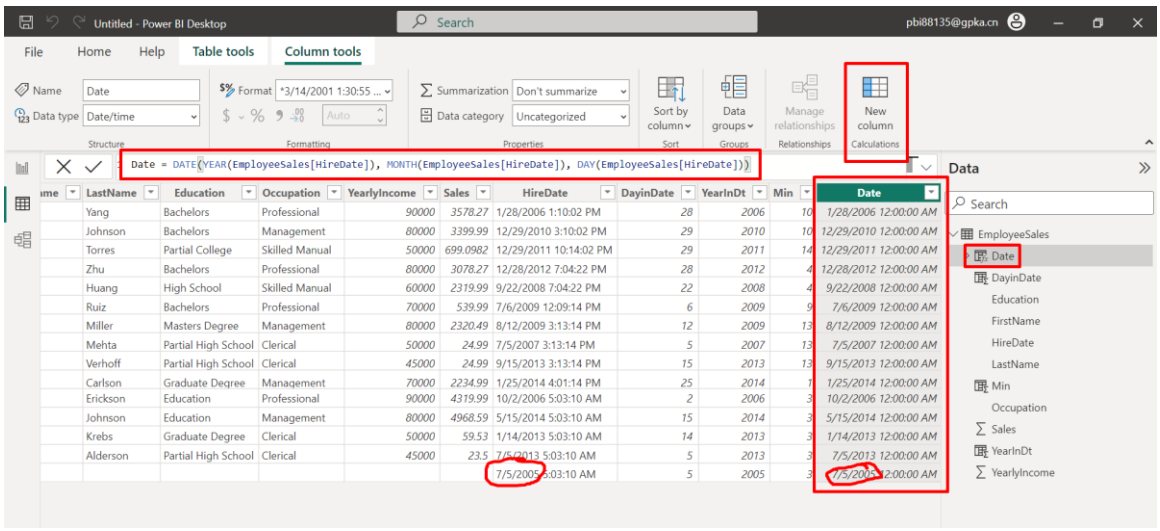
Min = MINUTE(EmployeeSales[HireDate])



FirstName	LastName	Education	Occupation	YearlyIncome	Sales	HireDate	DayinDate	YearInDt	Min
John	Yang	Bachelors	Professional	90000	3578.27	1/28/2006 1:10:02 PM	28	2006	10
Rob	Johnson	Bachelors	Management	80000	3399.99	12/29/2010 3:10:02 PM	29	2010	10
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	12/29/2011 10:14:02 PM	29	2011	14
Christy	Zhu	Bachelors	Professional	80000	3078.27	12/28/2012 7:04:22 PM	28	2012	4
Rob	Huang	High School	Skilled Manual	60000	2319.99	9/22/2008 7:04:22 PM	22	2008	4
John	Ruiz	Bachelors	Professional	70000	539.99	7/6/2009 12:09:14 PM	6	2009	9
John	Miller	Masters Degree	Management	80000	2320.49	8/12/2009 3:13:14 PM	12	2009	13
Christy	Mehta	Partial High School	Clerical	50000	24.99	7/5/2007 3:13:14 PM	5	2007	13
Rob	Verhoff	Partial High School	Clerical	45000	24.99	9/15/2013 3:13:14 PM	15	2013	13
Christy	Carlson	Graduate Degree	Management	70000	2234.99	1/25/2014 4:01:14 PM	25	2014	1
Gail	Erickson	Education	Professional	90000	4319.99	10/2/2006 5:03:10 AM	2	2006	3
Barry	Johnson	Education	Management	80000	4968.59	5/15/2014 5:03:10 AM	15	2014	3
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	1/14/2013 5:03:10 AM	14	2013	3
Greg	Alderson	Partial High School	Clerical	45000	23.5	7/5/2013 5:03:10 AM	5	2013	3
						7/5/2005 5:03:10 AM	5	2005	3

J. DAX DATE()

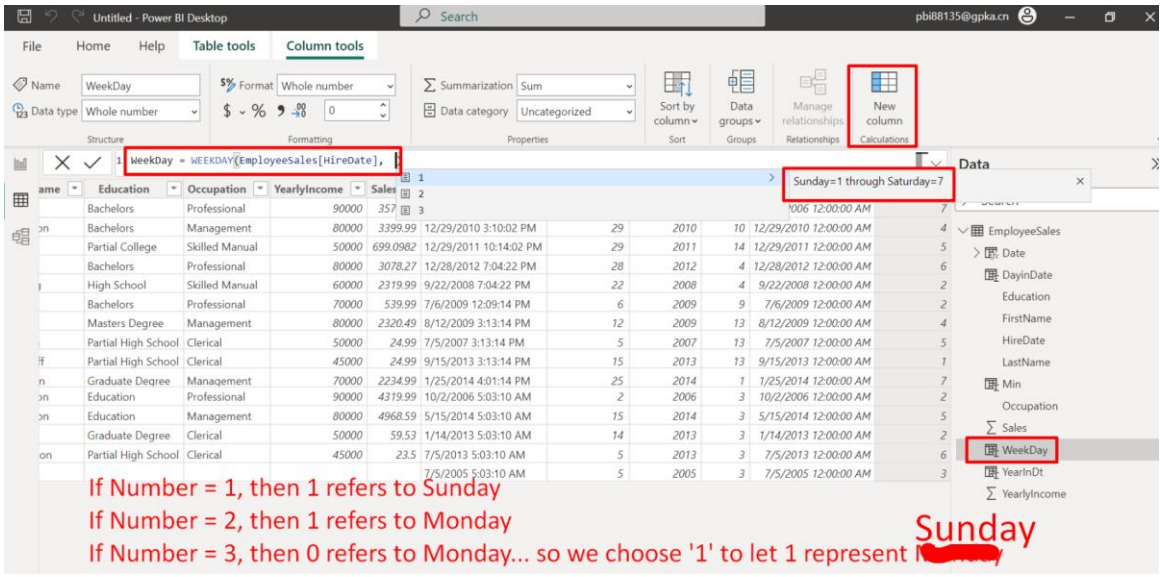
Date = DATE(YEAR(EmployeeSales[HireDate]), MONTH(EmployeeSales[HireDate]), DAY(EmployeeSales[HireDate]))

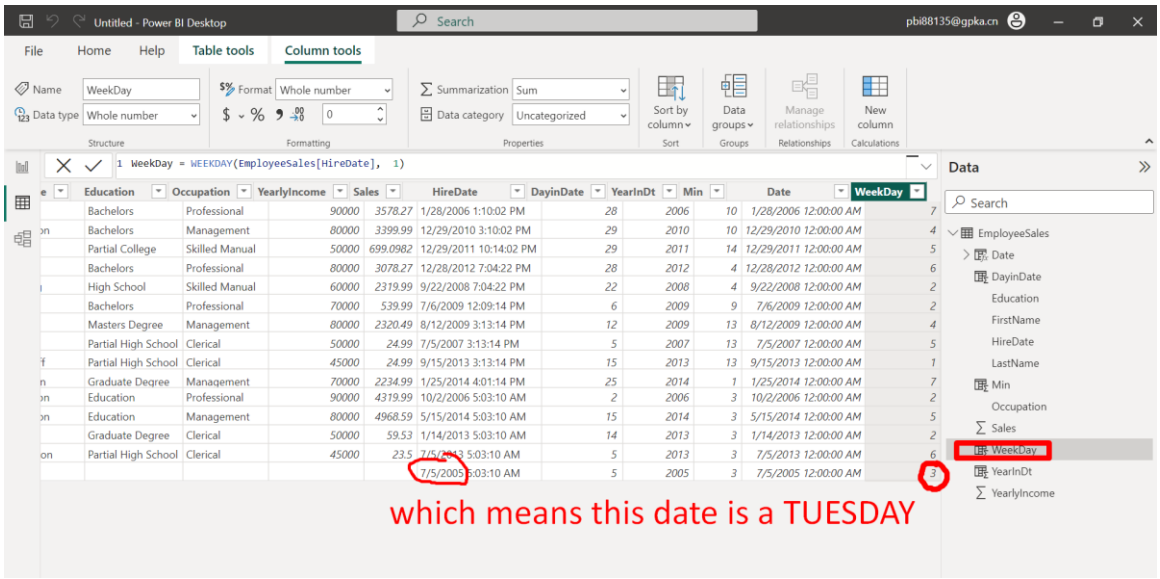


LastName	Education	Occupation	YearlyIncome	Sales	HireDate	DayinDate	YearInDt	Min	Date
Yang	Bachelors	Professional	90000	3578.27	1/28/2006 1:10:02 PM	28	2006	10	1/28/2006 12:00:00 AM
Johnson	Bachelors	Management	80000	3399.99	12/29/2010 3:10:02 PM	29	2010	10	12/29/2010 12:00:00 AM
Torres	Partial College	Skilled Manual	50000	699.0982	12/29/2011 10:14:02 PM	29	2011	14	12/29/2011 12:00:00 AM
Zhu	Bachelors	Professional	80000	3078.27	12/28/2012 7:04:22 PM	28	2012	4	12/28/2012 12:00:00 AM
Huang	High School	Skilled Manual	60000	2319.99	9/22/2008 7:04:22 PM	22	2008	4	9/22/2008 12:00:00 AM
Ruiz	Bachelors	Professional	70000	539.99	7/6/2009 12:09:14 PM	6	2009	9	7/6/2009 12:00:00 AM
Miller	Masters Degree	Management	80000	2320.49	8/12/2009 3:13:14 PM	12	2009	13	8/12/2009 12:00:00 AM
Mehta	Partial High School	Clerical	50000	24.99	7/5/2007 3:13:14 PM	5	2007	13	7/5/2007 12:00:00 AM
Verhoff	Partial High School	Clerical	45000	24.99	9/15/2013 3:13:14 PM	15	2013	13	9/15/2013 12:00:00 AM
Carlson	Graduate Degree	Management	70000	2234.99	1/25/2014 4:01:14 PM	25	2014	1	1/25/2014 12:00:00 AM
Erickson	Education	Professional	90000	4319.99	10/2/2006 5:03:10 AM	2	2006	3	10/2/2006 12:00:00 AM
Johnson	Education	Management	80000	4968.59	5/15/2014 5:03:10 AM	15	2014	3	5/15/2014 12:00:00 AM
Krebs	Graduate Degree	Clerical	50000	59.53	1/14/2013 5:03:10 AM	14	2013	3	1/14/2013 12:00:00 AM
Alderson	Partial High School	Clerical	45000	23.5	7/5/2013 5:03:10 AM	5	2013	3	7/5/2013 12:00:00 AM
					7/5/2005 5:03:10 AM	5	2005	3	7/5/2005 12:00:00 AM

K. DAX WEEKDAY()

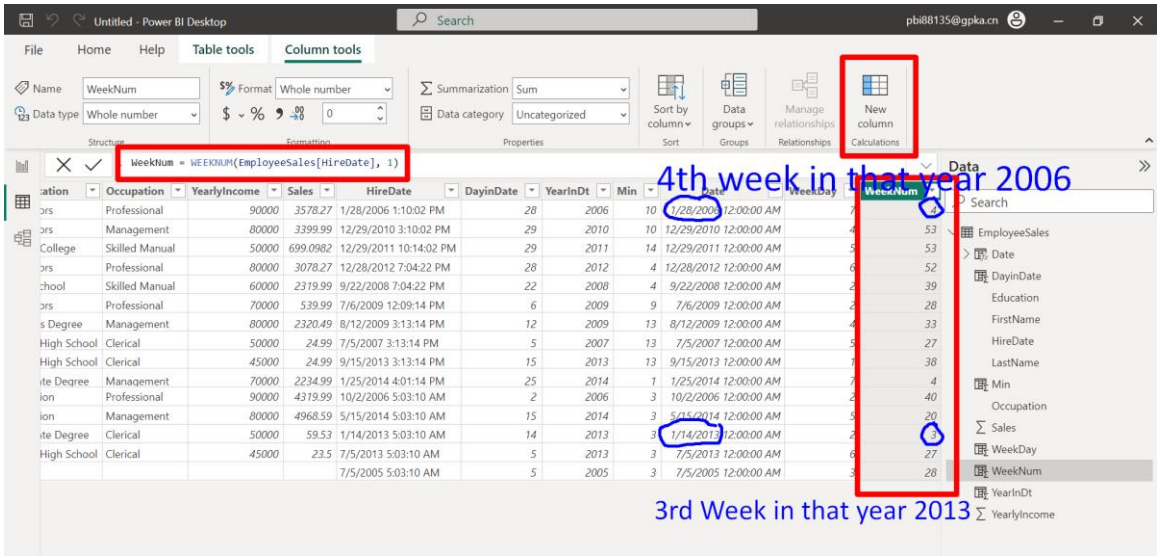
WeekDay = WEEKDAY(EmployeeSales[HireDate], 1)

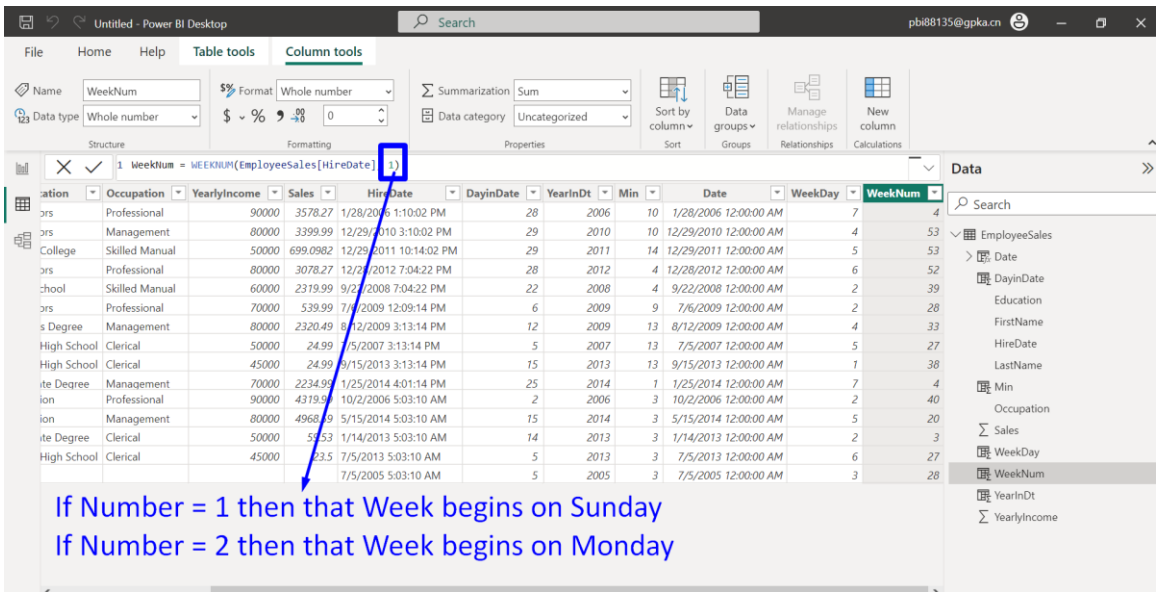




A. DAX WEEKNUM()

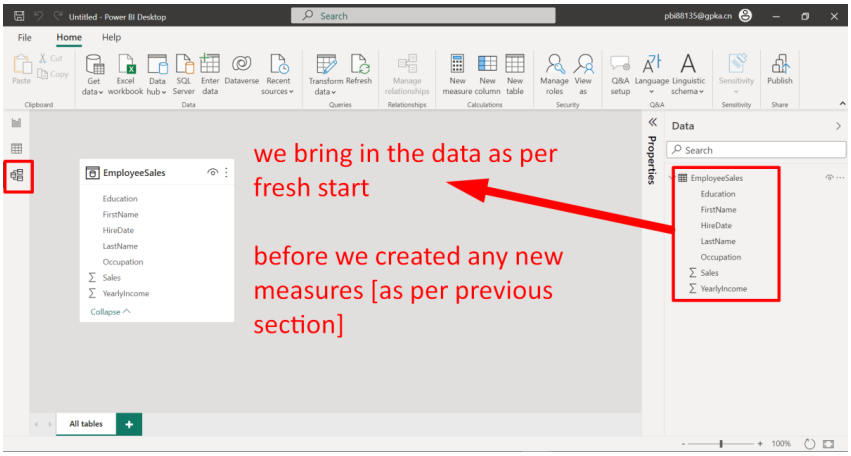
WeekNum = WEEKNUM(EmployeeSales[HireDate], 1)





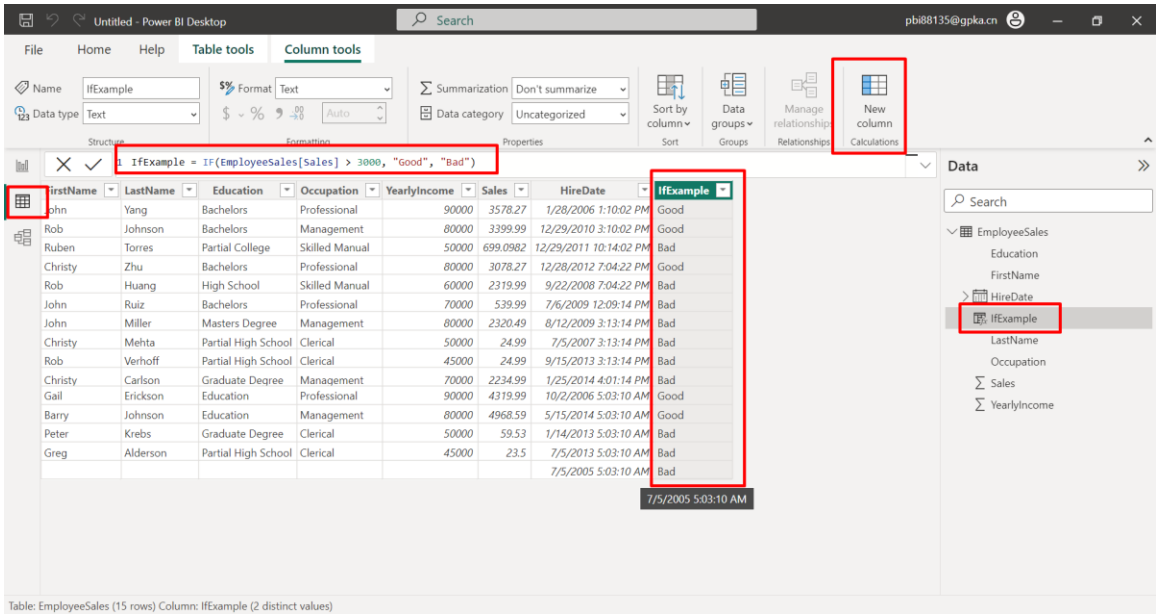
https://www.alvinang.sg/s/EmployeeSales.xlsx

A. BRING IN THE DATA FROM A FRESH NEW START



B. DAX IF

IfExample = IF(EmployeeSales[Sales] > 3000, "Good", "Bad")

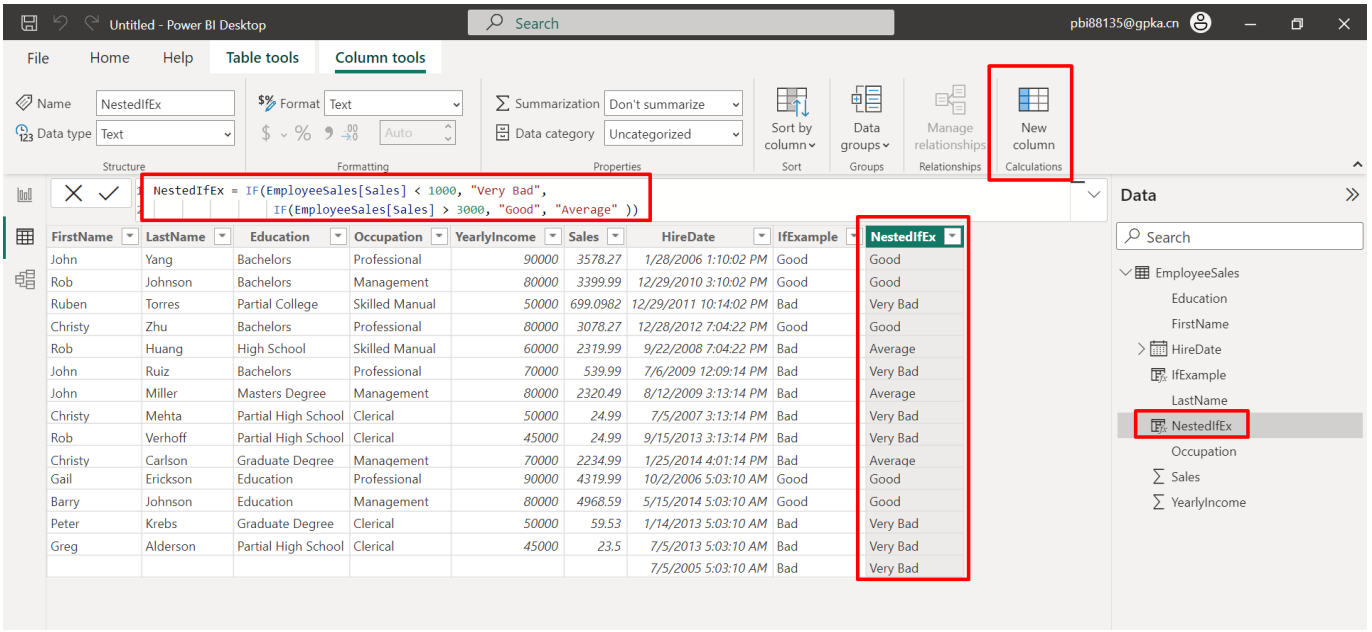


FirstName	LastName	Education	Occupation	YearlyIncome	Sales	HireDate	IfExample
John	Yang	Bachelors	Professional	90000	3578.27	1/28/2006 1:10:02 PM	Good
Rob	Johnson	Bachelors	Management	80000	3399.99	12/29/2010 3:10:02 PM	Good
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	12/29/2011 10:14:02 PM	Bad
Christy	Zhu	Bachelors	Professional	80000	3078.27	12/28/2012 7:04:22 PM	Good
Rob	Huang	High School	Skilled Manual	60000	2319.99	9/22/2008 7:04:22 PM	Bad
John	Ruiz	Bachelors	Professional	70000	539.99	7/6/2009 12:09:14 PM	Bad
John	Miller	Masters Degree	Management	80000	2320.49	8/12/2009 3:13:14 PM	Bad
Christy	Mehta	Partial High School	Clerical	50000	24.99	7/5/2007 3:13:14 PM	Bad
Rob	Verhoff	Partial High School	Clerical	45000	24.99	9/15/2013 3:13:14 PM	Bad
Christy	Carlson	Graduate Degree	Management	70000	2234.99	1/25/2014 4:01:14 PM	Bad
Gail	Erickson	Education	Professional	90000	4319.99	10/2/2006 5:03:10 AM	Good
Barry	Johnson	Education	Management	80000	4968.59	5/15/2014 5:03:10 AM	Good
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	1/14/2013 5:03:10 AM	Bad
Greg	Alderson	Partial High School	Clerical	45000	23.5	7/5/2013 5:03:10 AM	Bad
						7/5/2005 5:03:10 AM	Bad

7/5/2005 5:03:10 AM

C. DAX NEST IF

```
NestedIfEx =
IF(EmployeeSales[Sales] < 1000, "Very Bad",
    IF(EmployeeSales[Sales] > 3000, "Good",
    "Average" ))
```



FirstName	LastName	Education	Occupation	YearlyIncome	Sales	HireDate	IfExample	NestedIfEx
John	Yang	Bachelors	Professional	90000	3578.27	1/28/2006 1:10:02 PM	Good	Good
Rob	Johnson	Bachelors	Management	80000	3399.99	12/29/2010 3:10:02 PM	Good	Good
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	12/29/2011 10:14:02 PM	Bad	Very Bad
Christy	Zhu	Bachelors	Professional	80000	3078.27	12/28/2012 7:04:22 PM	Good	Good
Rob	Huang	High School	Skilled Manual	60000	2319.99	9/22/2008 7:04:22 PM	Bad	Average
John	Ruiz	Bachelors	Professional	70000	539.99	7/6/2009 12:09:14 PM	Bad	Very Bad
John	Miller	Masters Degree	Management	80000	2320.49	8/12/2009 3:13:14 PM	Bad	Average
Christy	Mehta	Partial High School	Clerical	50000	24.99	7/5/2007 3:13:14 PM	Bad	Very Bad
Rob	Verhoff	Partial High School	Clerical	45000	24.99	9/15/2013 3:13:14 PM	Bad	Very Bad
Christy	Carlson	Graduate Degree	Management	70000	2234.99	1/25/2014 4:01:14 PM	Bad	Average
Gail	Erickson	Education	Professional	90000	4319.99	10/2/2006 5:03:10 AM	Good	Good
Barry	Johnson	Education	Management	80000	4968.59	5/15/2014 5:03:10 AM	Good	Good
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	1/14/2013 5:03:10 AM	Bad	Very Bad
Greg	Alderson	Partial High School	Clerical	45000	23.5	7/5/2013 5:03:10 AM	Bad	Very Bad
						7/5/2005 5:03:10 AM	Bad	Very Bad

D. DAX AND

AndSales

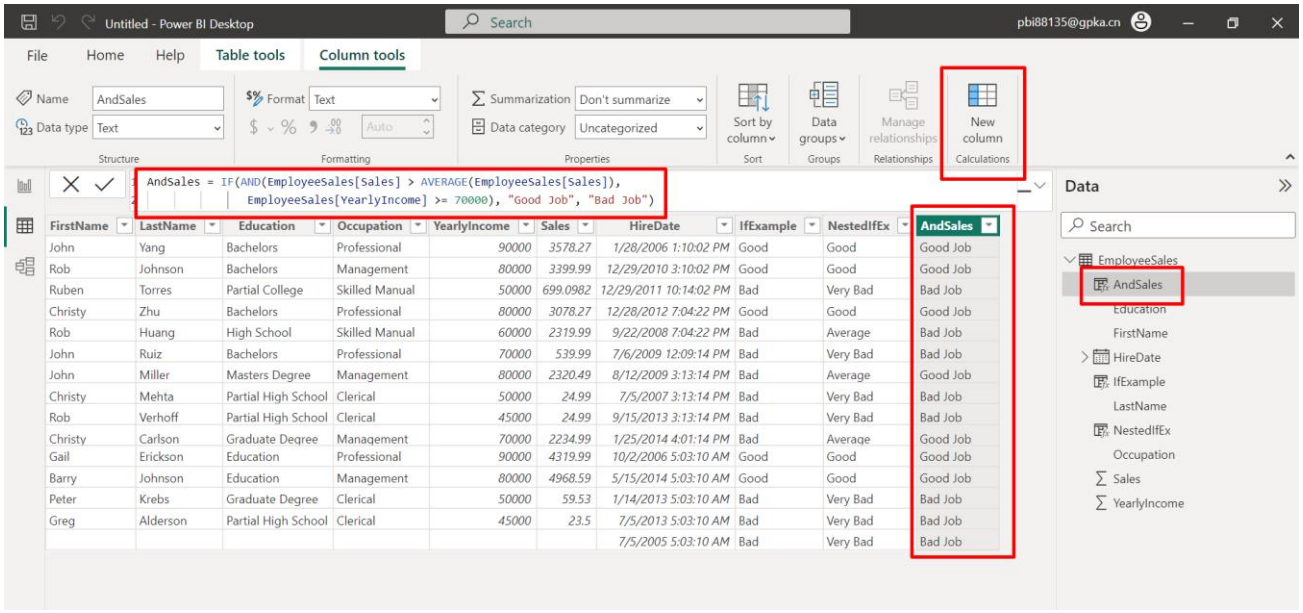
=

IF(AND(

EmployeeSales[Sales] > AVERAGE(EmployeeSales[Sales]),

EmployeeSales[YearlyIncome] >= 70000),

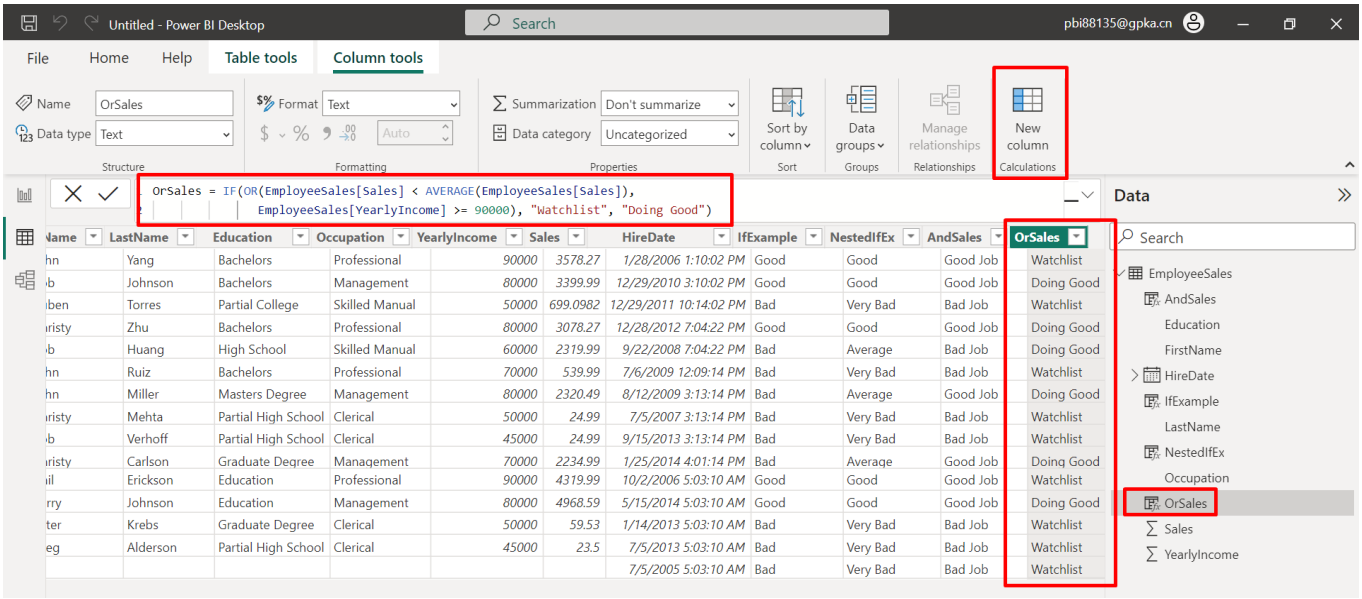
"Good Job", "Bad Job")



FirstName	LastName	Education	Occupation	YearlyIncome	Sales	HireDate	IfExample	NestedIfEx	AndSales
John	Yang	Bachelors	Professional	90000	3578.27	1/28/2006 1:10:02 PM	Good	Good	Good Job
Rob	Johnson	Bachelors	Management	80000	3399.99	12/29/2010 3:10:02 PM	Good	Good	Good Job
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	12/29/2011 10:14:02 PM	Bad	Very Bad	Bad Job
Christy	Zhu	Bachelors	Professional	80000	3078.27	12/28/2012 7:04:22 PM	Good	Good	Good Job
Rob	Huang	High School	Skilled Manual	60000	2319.99	9/22/2008 7:04:22 PM	Bad	Average	Bad Job
John	Ruiz	Bachelors	Professional	70000	539.99	7/6/2009 12:09:14 PM	Bad	Very Bad	Bad Job
John	Miller	Masters Degree	Management	80000	2320.49	8/12/2009 3:13:14 PM	Bad	Average	Good Job
Christy	Mehta	Partial High School	Clerical	50000	24.99	7/5/2007 3:13:14 PM	Bad	Very Bad	Bad Job
Rob	Verhoff	Partial High School	Clerical	45000	24.99	9/15/2013 3:13:14 PM	Bad	Very Bad	Bad Job
Christy	Carlson	Graduate Degree	Management	70000	2234.99	1/25/2014 4:01:14 PM	Bad	Average	Good Job
Gail	Erickson	Education	Professional	90000	4319.99	10/2/2006 5:03:10 AM	Good	Good	Good Job
Barry	Johnson	Education	Management	80000	4968.59	5/15/2014 5:03:10 AM	Good	Good	Good Job
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	1/14/2013 5:03:10 AM	Bad	Very Bad	Bad Job
Greg	Alderson	Partial High School	Clerical	45000	23.5	7/5/2013 5:03:10 AM	Bad	Very Bad	Bad Job
						7/5/2005 5:03:10 AM	Bad	Very Bad	Bad Job

E. DAX OR

```
OrSales
=
IF(OR(
EmployeeSales[Sales] < AVERAGE(EmployeeSales[Sales]),
EmployeeSales[YearlyIncome] >= 90000),
"Watchlist", "Doing Good")
```



Name	LastName	Education	Occupation	YearlyIncome	Sales	HireDate	IfExample	NestedIfEx	AndSales	OrSales
hn	Yang	Bachelors	Professional	90000	3578.27	1/28/2006 1:10:02 PM	Good	Good	Good Job	Watchlist
b	Johnson	Bachelors	Management	80000	3399.99	12/29/2010 3:10:02 PM	Good	Good	Good Job	Doing Good
iben	Torres	Partial College	Skilled Manual	50000	699.0982	12/29/2011 10:14:02 PM	Bad	Very Bad	Bad Job	Watchlist
risty	Zhu	Bachelors	Professional	80000	3078.27	12/28/2012 7:04:22 PM	Good	Good	Good Job	Doing Good
b	Huang	High School	Skilled Manual	60000	2319.99	9/22/2008 7:04:22 PM	Bad	Average	Bad Job	Doing Good
hn	Ruiz	Bachelors	Professional	70000	539.99	7/6/2009 12:09:14 PM	Bad	Very Bad	Bad Job	Watchlist
hn	Miller	Masters Degree	Management	80000	2320.49	8/12/2009 3:13:14 PM	Bad	Average	Good Job	Doing Good
risty	Mehta	Partial High School	Clerical	50000	24.99	7/5/2007 3:13:14 PM	Bad	Very Bad	Bad Job	Watchlist
b	Verhoff	Partial High School	Clerical	45000	24.99	9/15/2013 3:13:14 PM	Bad	Very Bad	Bad Job	Watchlist
risty	Carlson	Graduate Degree	Management	70000	2234.99	1/25/2014 4:01:14 PM	Bad	Average	Good Job	Doing Good
il	Erickson	Education	Professional	90000	4319.99	10/2/2006 5:03:10 AM	Good	Good	Good Job	Watchlist
rry	Johnson	Education	Management	80000	4968.59	5/15/2014 5:03:10 AM	Good	Good	Good Job	Doing Good
ter	Krebs	Graduate Degree	Clerical	50000	59.53	1/14/2013 5:03:10 AM	Bad	Very Bad	Bad Job	Watchlist
eg	Alderson	Partial High School	Clerical	45000	23.5	7/5/2013 5:03:10 AM	Bad	Very Bad	Bad Job	Watchlist
						7/5/2005 5:03:10 AM	Bad	Very Bad	Bad Job	Watchlist

F. DAX NOT

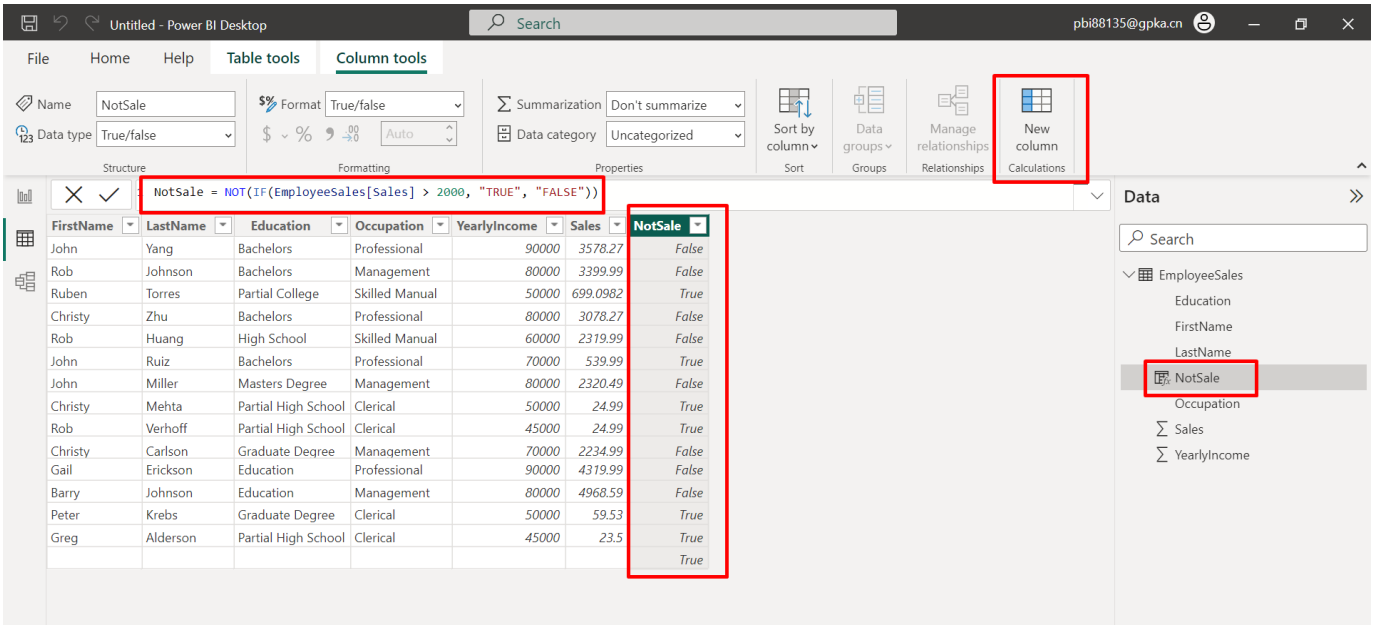
NotSale

=

NOT(IF(

EmployeeSales[Sales] > 2000,

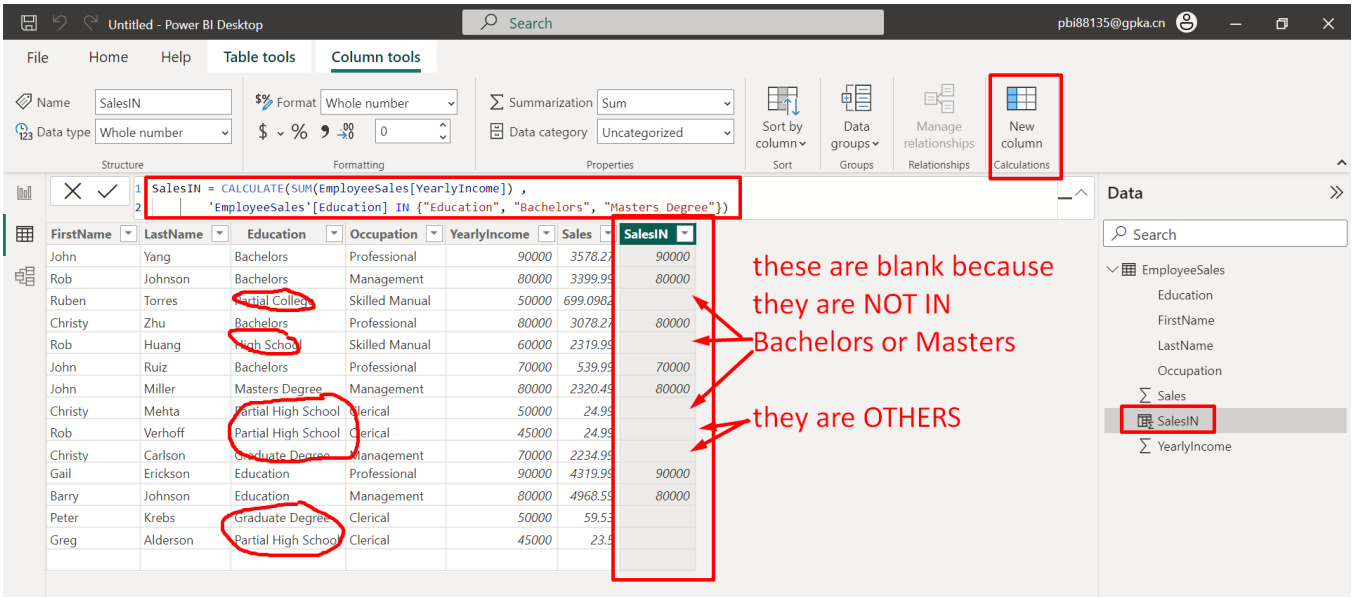
"TRUE", "FALSE")



FirstName	LastName	Education	Occupation	YearlyIncome	Sales	NotSale
John	Yang	Bachelors	Professional	90000	3578.27	False
Rob	Johnson	Bachelors	Management	80000	3399.99	False
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	True
Christy	Zhu	Bachelors	Professional	80000	3078.27	False
Rob	Huang	High School	Skilled Manual	60000	2319.99	False
John	Ruiz	Bachelors	Professional	70000	539.99	True
John	Miller	Masters Degree	Management	80000	2320.49	False
Christy	Mehta	Partial High School	Clerical	50000	24.99	True
Rob	Verhoff	Partial High School	Clerical	45000	24.99	True
Christy	Carlson	Graduate Degree	Management	70000	2234.99	False
Gail	Erickson	Education	Professional	90000	4319.99	False
Barry	Johnson	Education	Management	80000	4968.59	False
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	True
Greg	Alderson	Partial High School	Clerical	45000	23.5	True
						True

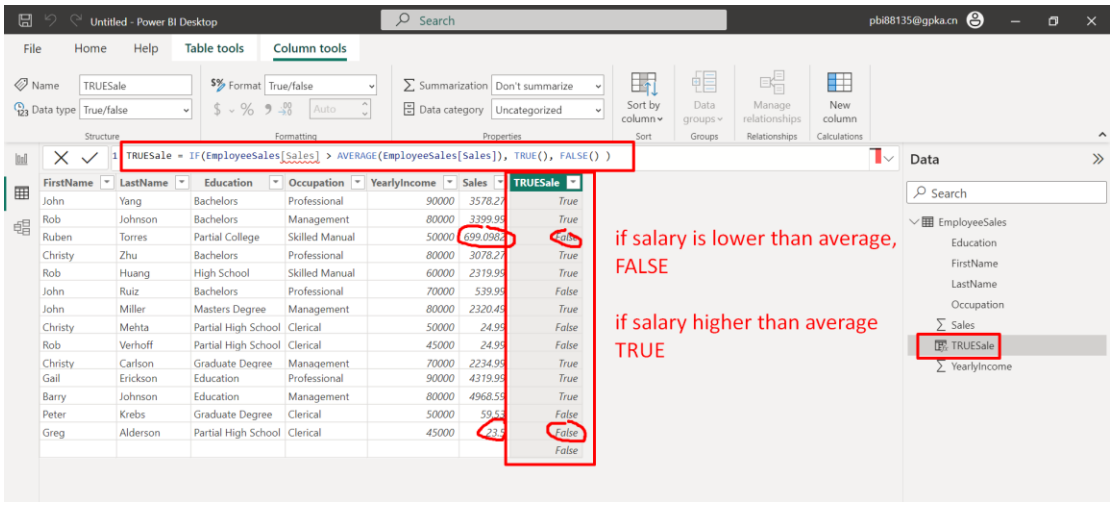
G. DAX CALCULATE IN

```
SalesIN
=
CALCULATE(SUM(
EmployeeSales[YearlyIncome]) ,
'EmployeeSales'[Education]
IN {
"Education", "Bachelors", "Masters Degree"})
```



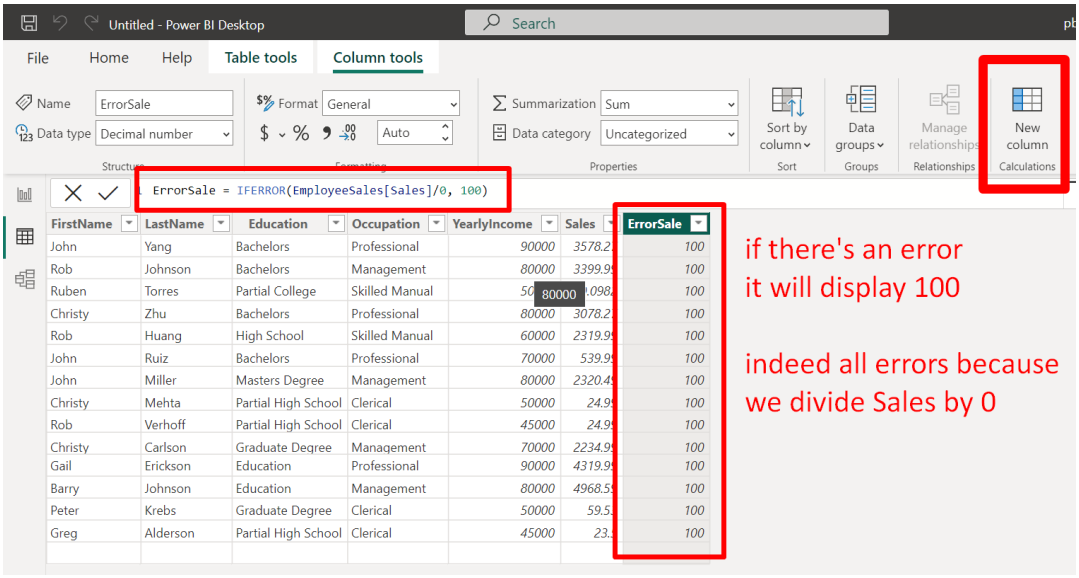
H. DAX TRUE

```
TRUESale =
IF(
EmployeeSales[Sales] > AVERAGE(EmployeeSales[Sales]),
TRUE(), FALSE() )
```



I. DAX IFERROR

```
ErrorSale = IFERROR(
EmployeeSales[Sales]/0, 100)
```



J. DAX SWITCH

SwitchMonth

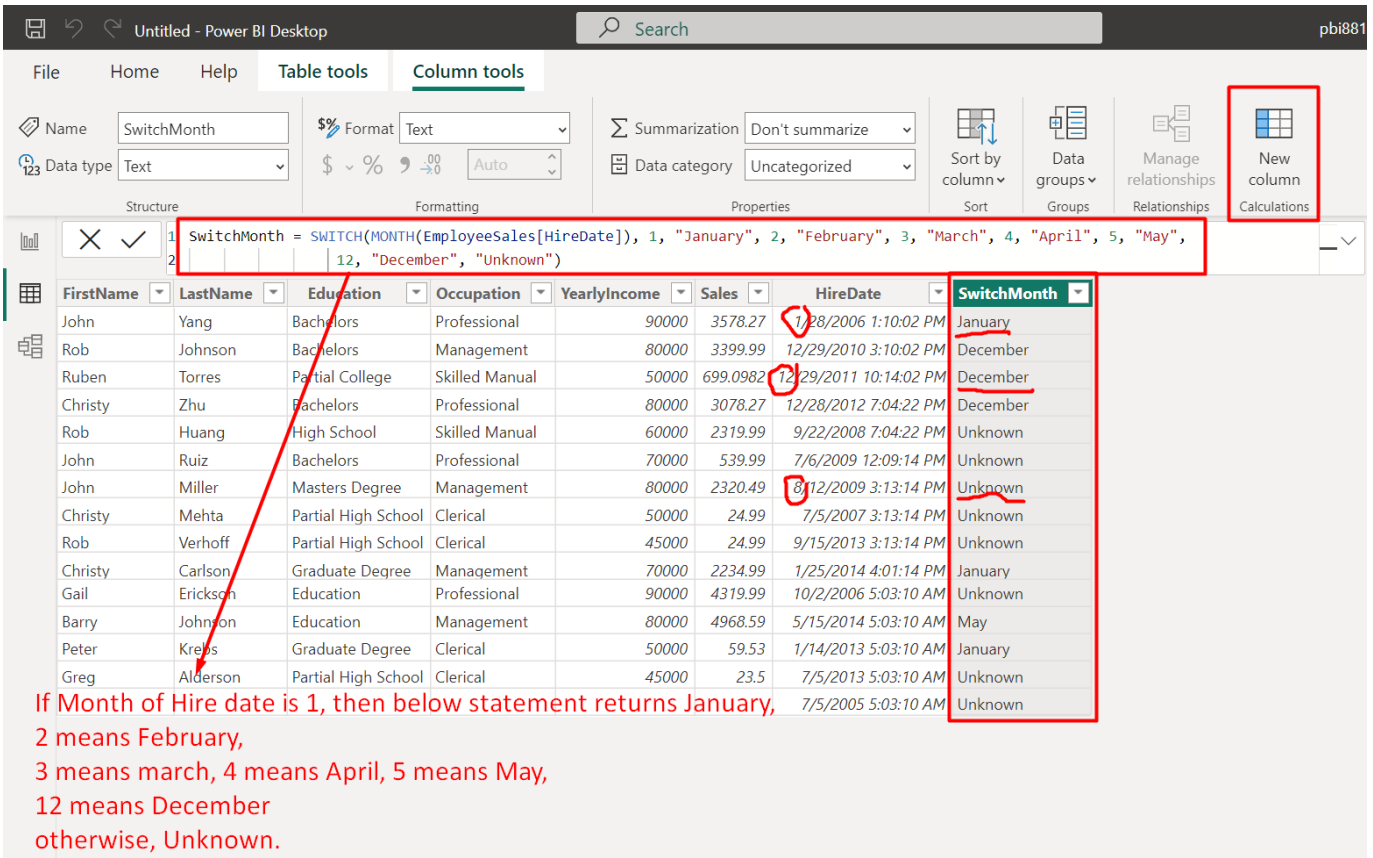
=

SWITCH(MONTH(

EmployeeSales[HireDate]),

1, "January", 2, "February", 3, "March", 4, "April", 5, "May", 12, "December",

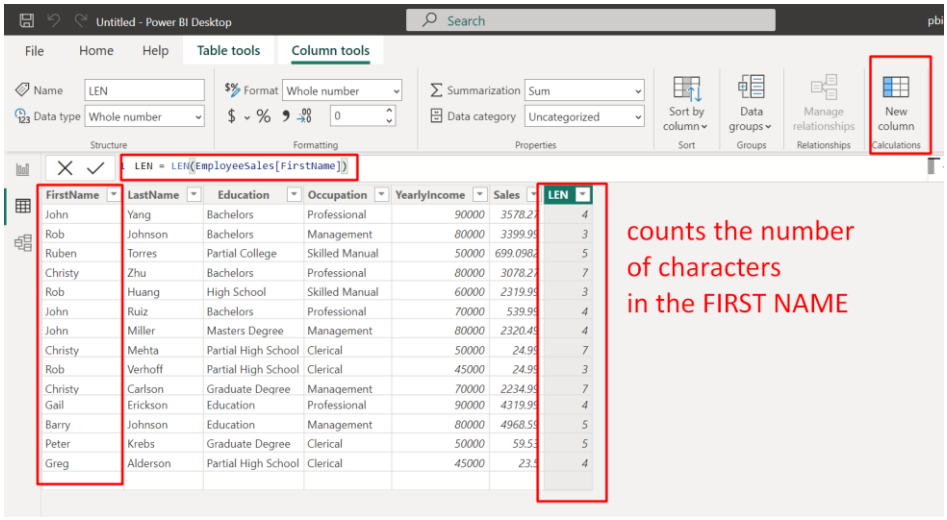
"Unknown")



FirstName	LastName	Education	Occupation	YearlyIncome	Sales	HireDate	SwitchMonth
John	Yang	Bachelors	Professional	90000	3578.27	1/28/2006 1:10:02 PM	January
Rob	Johnson	Bachelors	Management	80000	3399.99	12/29/2010 3:10:02 PM	December
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	12/29/2011 10:14:02 PM	December
Christy	Zhu	Bachelors	Professional	80000	3078.27	12/28/2012 7:04:22 PM	December
Rob	Huang	High School	Skilled Manual	60000	2319.99	9/22/2008 7:04:22 PM	Unknown
John	Ruiz	Bachelors	Professional	70000	539.99	7/6/2009 12:09:14 PM	Unknown
John	Miller	Masters Degree	Management	80000	2320.49	8/12/2009 3:13:14 PM	Unknown
Christy	Mehta	Partial High School	Clerical	50000	24.99	7/5/2007 3:13:14 PM	Unknown
Rob	Verhoff	Partial High School	Clerical	45000	24.99	9/15/2013 3:13:14 PM	Unknown
Christy	Carlson	Graduate Degree	Management	70000	2234.99	1/25/2014 4:01:14 PM	January
Gail	Erickson	Education	Professional	90000	4319.99	10/2/2006 5:03:10 AM	Unknown
Barry	Johnson	Education	Management	80000	4968.59	5/15/2014 5:03:10 AM	May
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	1/14/2013 5:03:10 AM	January
Greg	Alderson	Partial High School	Clerical	45000	23.5	7/5/2013 5:03:10 AM	Unknown
						7/5/2005 5:03:10 AM	Unknown

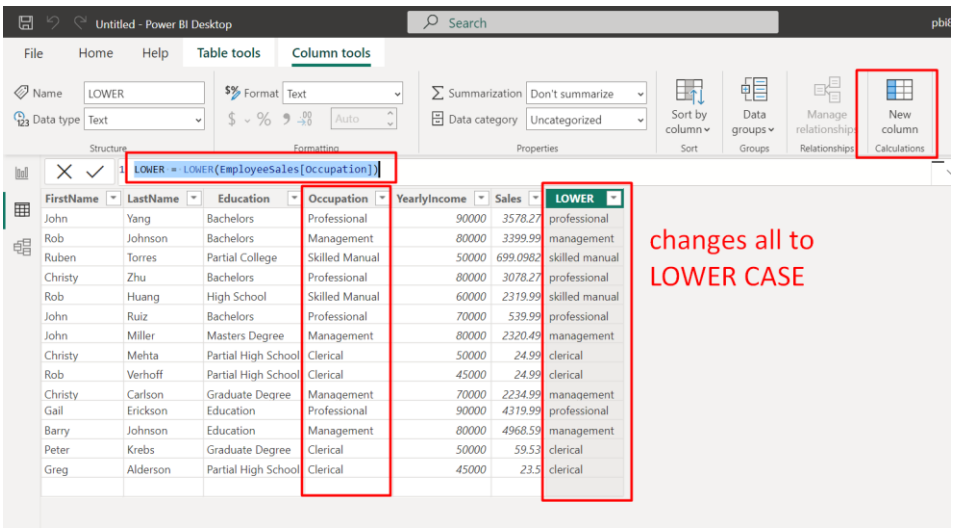
A. DAX LEN

LEN = LEN(EmployeeSales[FirstName])



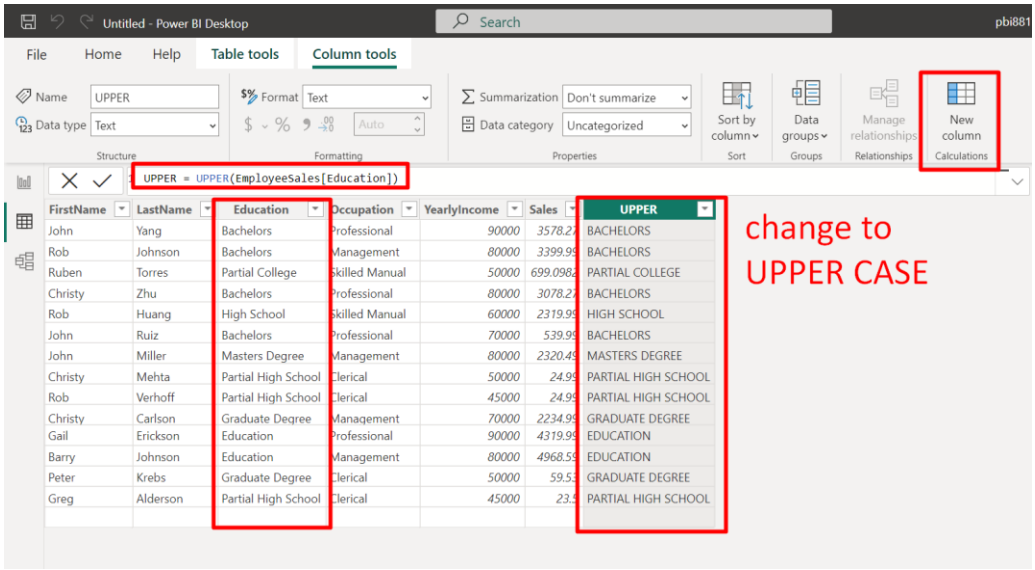
B. DAX LOWER

LOWER = LOWER(EmployeeSales[Occupation])



C. DAX UPPER

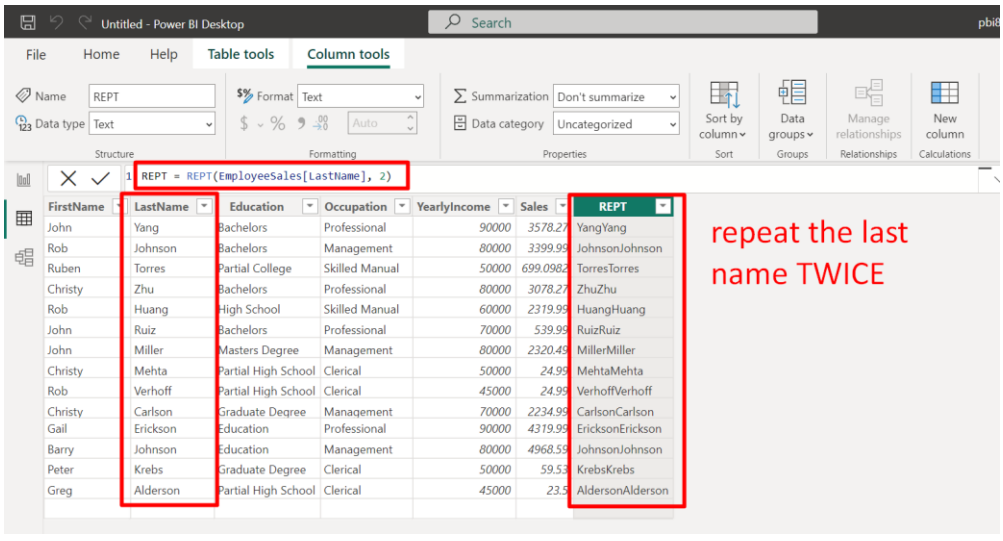
UPPER = UPPER(EmployeeSales[Education])



FirstName	LastName	Education	Occupation	YearlyIncome	Sales	UPPER
John	Yang	Bachelors	Professional	90000	3578.27	BACHELORS
Rob	Johnson	Bachelors	Management	80000	3399.99	BACHELORS
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	PARTIAL COLLEGE
Christy	Zhu	Bachelors	Professional	80000	3078.27	BACHELORS
Rob	Huang	High School	Skilled Manual	60000	2319.99	HIGH SCHOOL
John	Ruiz	Bachelors	Professional	70000	539.99	BACHELORS
John	Miller	Masters Degree	Management	80000	2320.49	MASTERS DEGREE
Christy	Mehta	Partial High School	Clerical	50000	24.99	PARTIAL HIGH SCHOOL
Rob	Verhoff	Partial High School	Clerical	45000	24.99	PARTIAL HIGH SCHOOL
Christy	Carlson	Graduate Degree	Management	70000	2234.99	GRADUATE DEGREE
Gail	Erickson	Education	Professional	90000	4319.99	EDUCATION
Barry	Johnson	Education	Management	80000	4968.59	EDUCATION
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	GRADUATE DEGREE
Greg	Alderson	Partial High School	Clerical	45000	23.5	PARTIAL HIGH SCHOOL

D. DAX REPT

REPT = REPT(EmployeeSales[LastName], 2)



FirstName	LastName	Education	Occupation	YearlyIncome	Sales	REPT
John	Yang	Bachelors	Professional	90000	3578.27	YangYang
Rob	Johnson	Bachelors	Management	80000	3399.99	JohnsonJohnson
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	TorresTorres
Christy	Zhu	Bachelors	Professional	80000	3078.27	ZhuZhu
Rob	Huang	High School	Skilled Manual	60000	2319.99	HuangHuang
John	Ruiz	Bachelors	Professional	70000	539.99	RuizRuiz
John	Miller	Masters Degree	Management	80000	2320.49	MillerMiller
Christy	Mehta	Partial High School	Clerical	50000	24.99	MehtaMehta
Rob	Verhoff	Partial High School	Clerical	45000	24.99	VerhoffVerhoff
Christy	Carlson	Graduate Degree	Management	70000	2234.99	CarlsonCarlson
Gail	Erickson	Education	Professional	90000	4319.99	EricksonErickson
Barry	Johnson	Education	Management	80000	4968.59	JohnsonJohnson
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	KrebsKrebs
Greg	Alderson	Partial High School	Clerical	45000	23.5	AldersonAlderson

E. DAX SUBSTITUTE

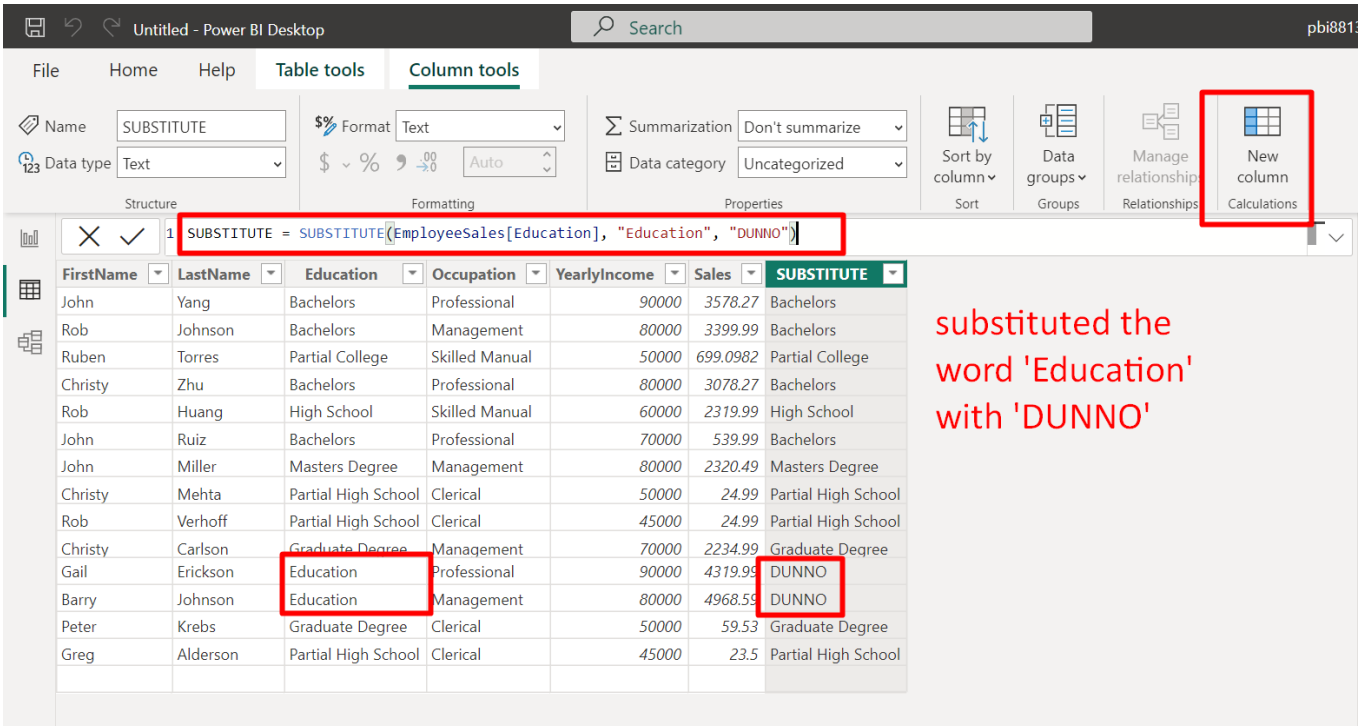
SUBSTITUTE

=

SUBSTITUTE(

EmployeeSales[Education],

"Education", "DUNNO")



FirstName	LastName	Education	Occupation	YearlyIncome	Sales	SUBSTITUTE
John	Yang	Bachelors	Professional	90000	3578.27	Bachelors
Rob	Johnson	Bachelors	Management	80000	3399.99	Bachelors
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	Partial College
Christy	Zhu	Bachelors	Professional	80000	3078.27	Bachelors
Rob	Huang	High School	Skilled Manual	60000	2319.99	High School
John	Ruiz	Bachelors	Professional	70000	539.99	Bachelors
John	Miller	Masters Degree	Management	80000	2320.49	Masters Degree
Christy	Mehta	Partial High School	Clerical	50000	24.99	Partial High School
Rob	Verhoff	Partial High School	Clerical	45000	24.99	Partial High School
Christy	Carlson	Graduate Degree	Management	70000	2234.99	Graduate Degree
Gail	Erickson	Education	Professional	90000	4319.99	DUNNO
Barry	Johnson	Education	Management	80000	4968.59	DUNNO
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	Graduate Degree
Greg	Alderson	Partial High School	Clerical	45000	23.5	Partial High School

F. DAX EXACT

EXACT

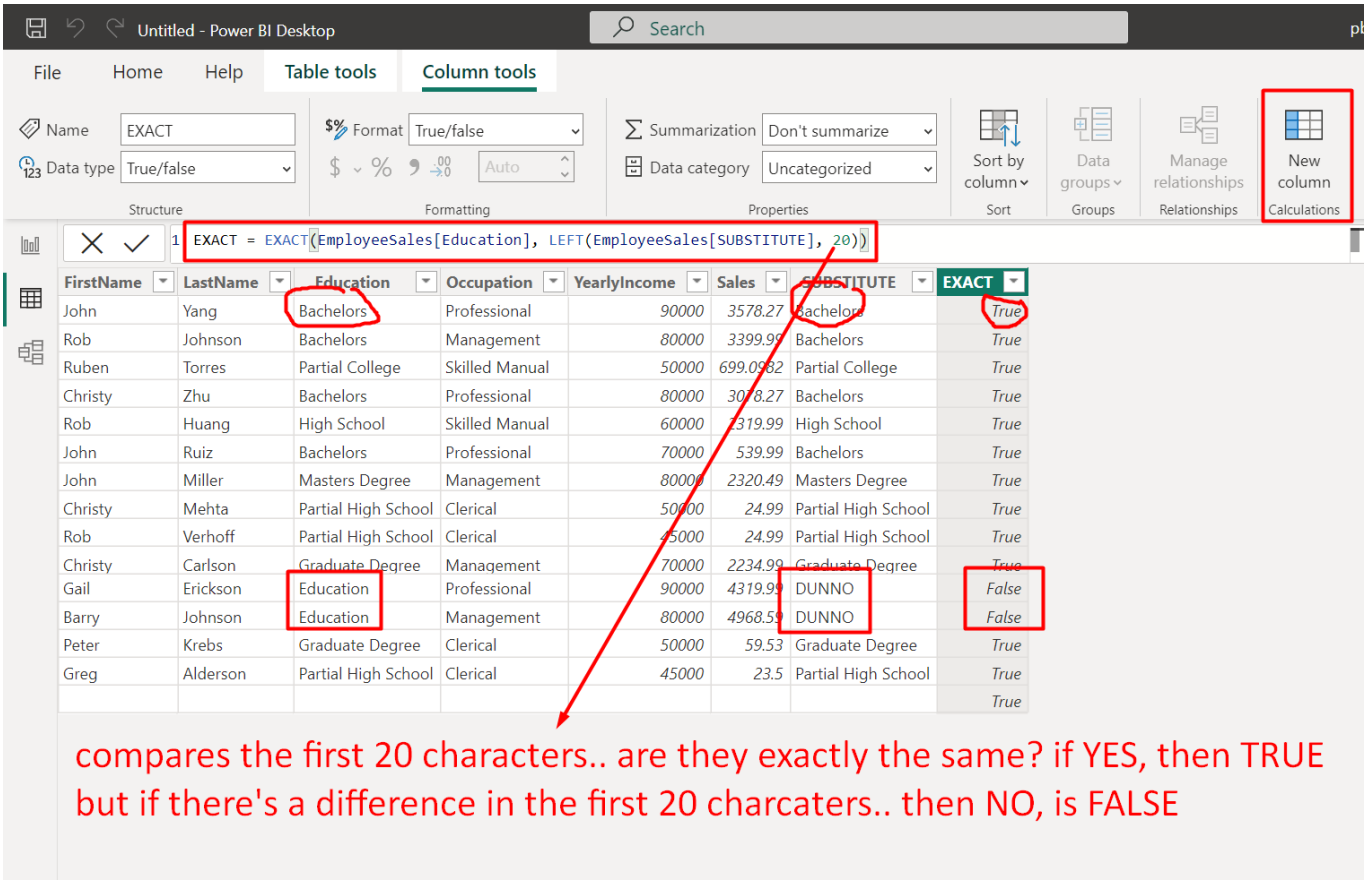
=

EXACT(

EmployeeSales[Education],

LEFT(

EmployeeSales[SUBSTITUTE], 20))



FirstName	LastName	Education	Occupation	YearlyIncome	Sales	SUBSTITUTE	EXACT
John	Yang	Bachelors	Professional	90000	3578.27	Bachelors	True
Rob	Johnson	Bachelors	Management	80000	3399.99	Bachelors	True
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	Partial College	True
Christy	Zhu	Bachelors	Professional	80000	3578.27	Bachelors	True
Rob	Huang	High School	Skilled Manual	60000	2319.99	High School	True
John	Ruiz	Bachelors	Professional	70000	539.99	Bachelors	True
John	Miller	Masters Degree	Management	80000	2320.49	Masters Degree	True
Christy	Mehta	Partial High School	Clerical	50000	24.99	Partial High School	True
Rob	Verhoff	Partial High School	Clerical	45000	24.99	Partial High School	True
Christy	Carlson	Graduate Degree	Management	70000	2234.99	Graduate Degree	True
Gail	Erickson	Education	Professional	90000	4319.99	DUNNO	False
Barry	Johnson	Education	Management	80000	4968.59	DUNNO	False
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	Graduate Degree	True
Greg	Alderson	Partial High School	Clerical	45000	23.5	Partial High School	True
							True

G. DAX CONCATENATE

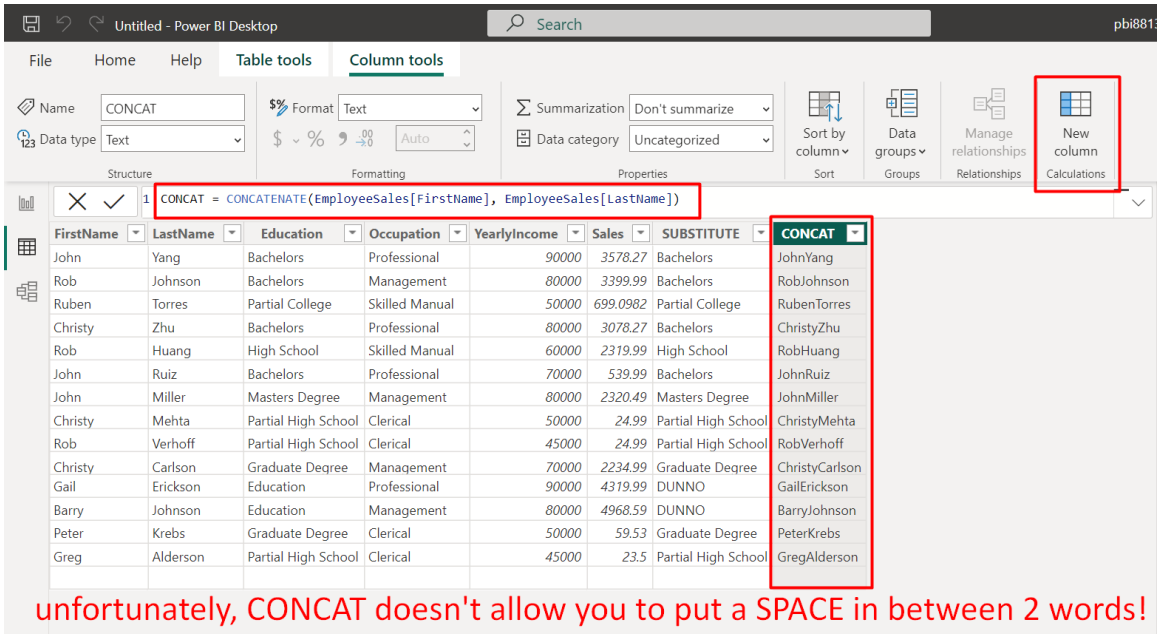
CONCAT

=

CONCATENATE(

EmployeeSales[FirstName],

EmployeeSales[LastName])



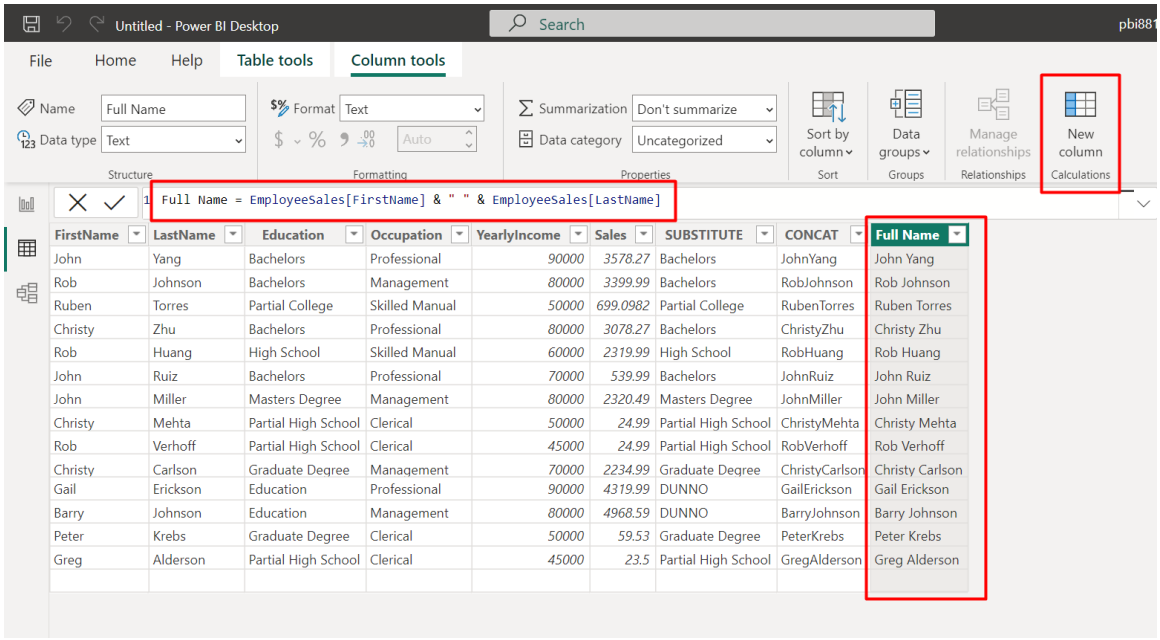
Try using this instead:

Full Name

=

EmployeeSales[FirstName] &

" " & EmployeeSales[LastName]



FirstName	LastName	Education	Occupation	YearlyIncome	Sales	SUBSTITUTE	CONCAT	Full Name
John	Yang	Bachelors	Professional	90000	3578.27	Bachelors	JohnYang	John Yang
Rob	Johnson	Bachelors	Management	80000	3399.99	Bachelors	RobJohnson	Rob Johnson
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	Partial College	RubenTorres	Ruben Torres
Christy	Zhu	Bachelors	Professional	80000	3078.27	Bachelors	ChristyZhu	Christy Zhu
Rob	Huang	High School	Skilled Manual	60000	2319.99	High School	RobHuang	Rob Huang
John	Ruiz	Bachelors	Professional	70000	539.99	Bachelors	JohnRuiz	John Ruiz
John	Miller	Masters Degree	Management	80000	2320.49	Masters Degree	JohnMiller	John Miller
Christy	Mehta	Partial High School	Clerical	50000	24.99	Partial High School	ChristyMehta	Christy Mehta
Rob	Verhoff	Partial High School	Clerical	45000	24.99	Partial High School	RobVerhoff	Rob Verhoff
Christy	Carlson	Graduate Degree	Management	70000	2234.99	Graduate Degree	ChristyCarlson	Christy Carlson
Gail	Erickson	Education	Professional	90000	4319.99	DUNNO	GailErickson	Gail Erickson
Barry	Johnson	Education	Management	80000	4968.59	DUNNO	BarryJohnson	Barry Johnson
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	Graduate Degree	PeterKrebs	Peter Krebs
Greg	Alderson	Partial High School	Clerical	45000	23.5	Partial High School	GregAlderson	Greg Alderson

COMBINE

=

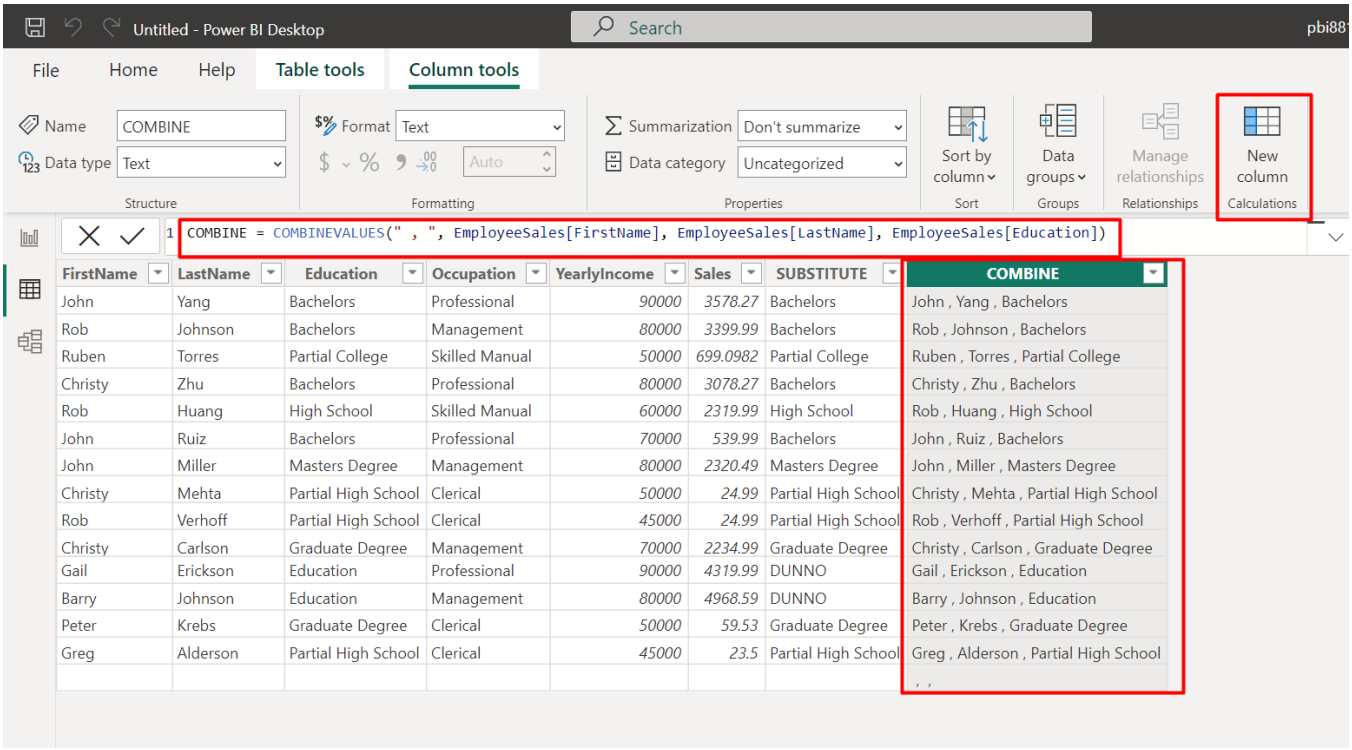
COMBINEVALUES(

" , ",

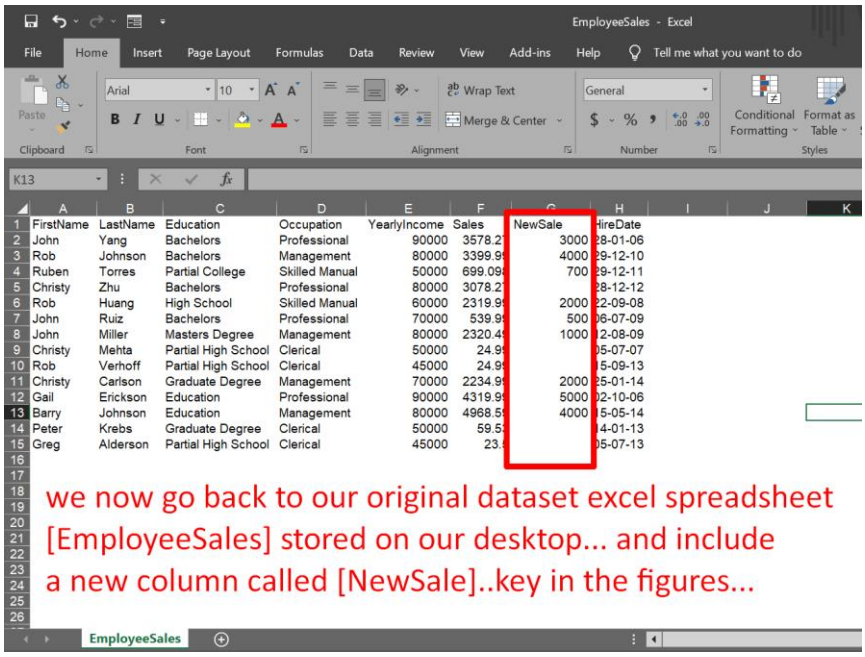
EmployeeSales[FirstName],

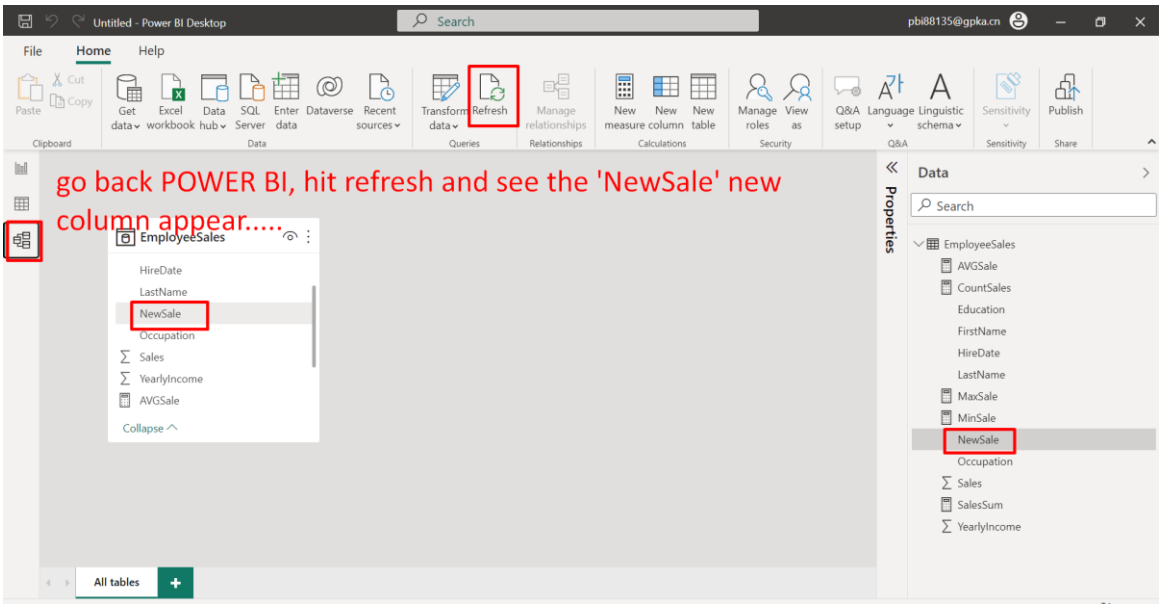
EmployeeSales[LastName],

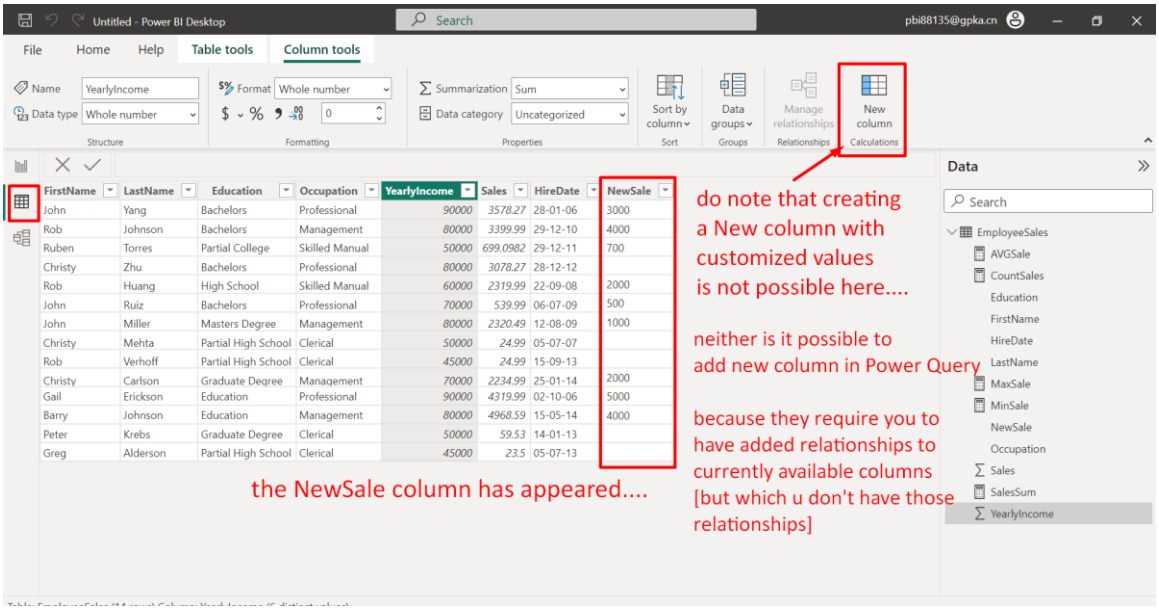
EmployeeSales[Education])



FirstName	LastName	Education	Occupation	YearlyIncome	Sales	SUBSTITUTE	COMBINE
John	Yang	Bachelors	Professional	90000	3578.27	Bachelors	John , Yang , Bachelors
Rob	Johnson	Bachelors	Management	80000	3399.99	Bachelors	Rob , Johnson , Bachelors
Ruben	Torres	Partial College	Skilled Manual	50000	699.0982	Partial College	Ruben , Torres , Partial College
Christy	Zhu	Bachelors	Professional	80000	3078.27	Bachelors	Christy , Zhu , Bachelors
Rob	Huang	High School	Skilled Manual	60000	2319.99	High School	Rob , Huang , High School
John	Ruiz	Bachelors	Professional	70000	539.99	Bachelors	John , Ruiz , Bachelors
John	Miller	Masters Degree	Management	80000	2320.49	Masters Degree	John , Miller , Masters Degree
Christy	Mehta	Partial High School	Clerical	50000	24.99	Partial High School	Christy , Mehta , Partial High School
Rob	Verhoff	Partial High School	Clerical	45000	24.99	Partial High School	Rob , Verhoff , Partial High School
Christy	Carlson	Graduate Degree	Management	70000	2234.99	Graduate Degree	Christy , Carlson , Graduate Degree
Gail	Erickson	Education	Professional	90000	4319.99	DUNNO	Gail , Erickson , Education
Barry	Johnson	Education	Management	80000	4968.59	DUNNO	Barry , Johnson , Education
Peter	Krebs	Graduate Degree	Clerical	50000	59.53	Graduate Degree	Peter , Krebs , Graduate Degree
Greg	Alderson	Partial High School	Clerical	45000	23.5	Partial High School	Greg , Alderson , Partial High School
							, ,







Dr. Alvin Ang earned his Ph.D., Masters and Bachelor degrees from NTU, Singapore. He is a scientist, entrepreneur, as well as a personal/business advisor. More about him at www.AlvinAng.sg.