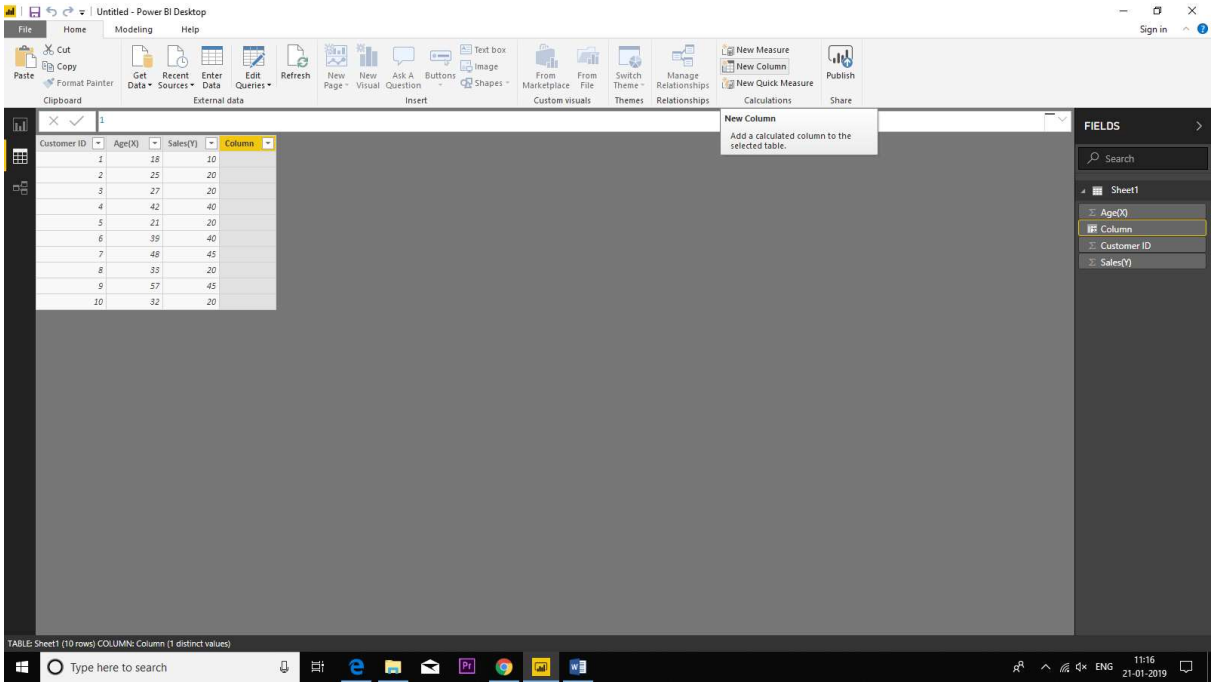
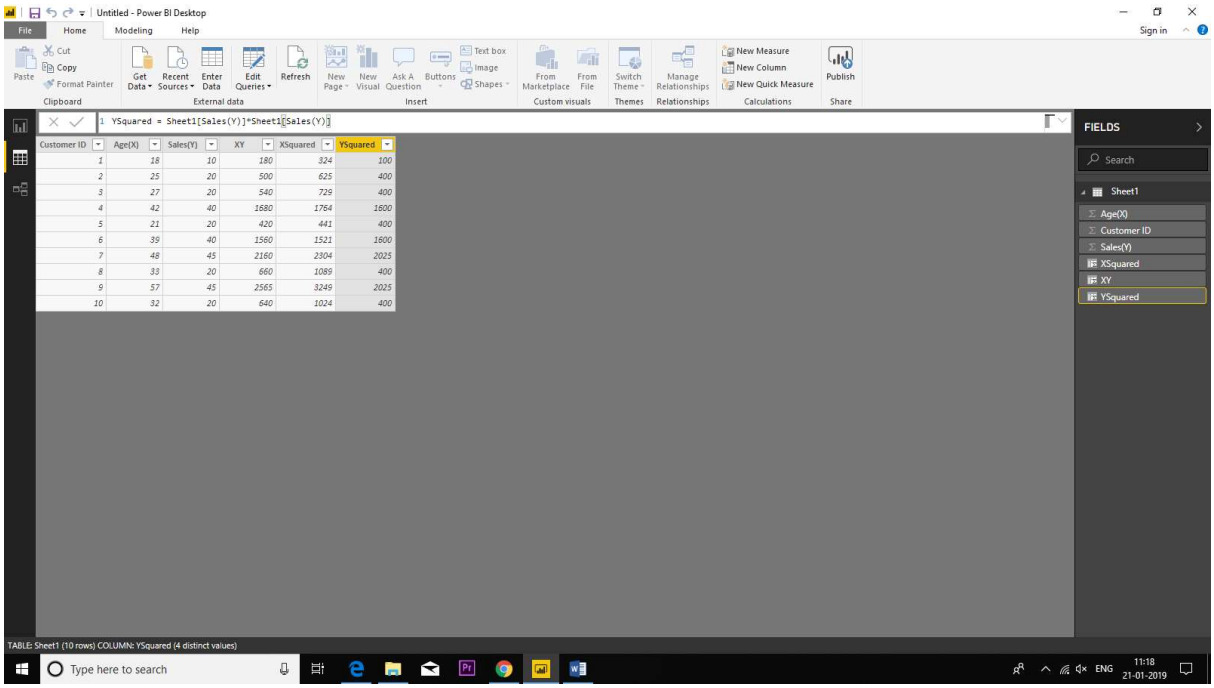
Practical 9: Perform Linear Regression on given data warehouse data.

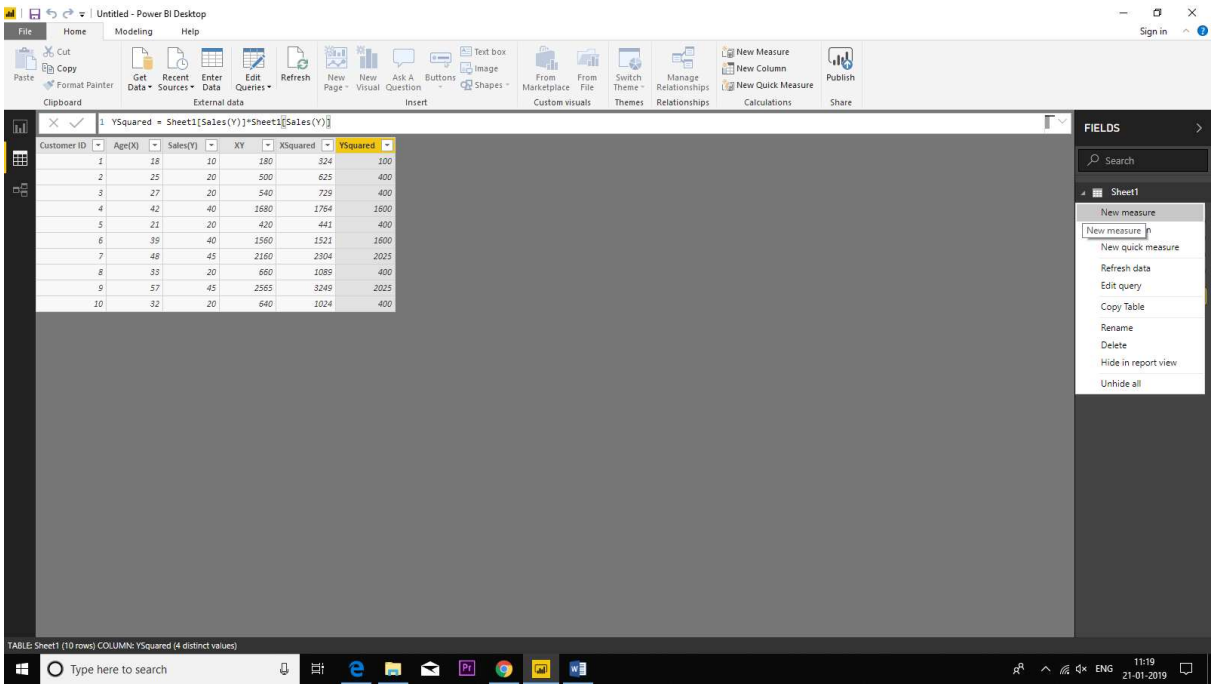
Step 1: Open data in Power BI. (Get Data→Excel→Edit).



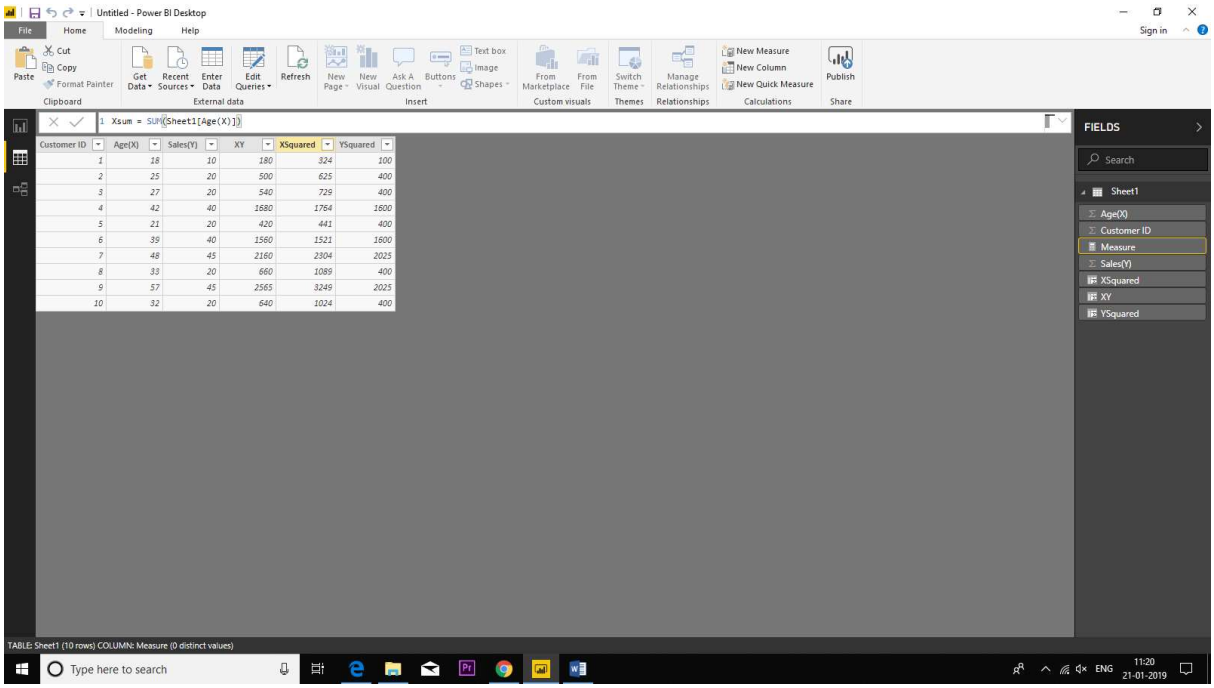

Step 2 : Add more columns as per formula of XY, XSquare, YSquare. For performing linear regression.



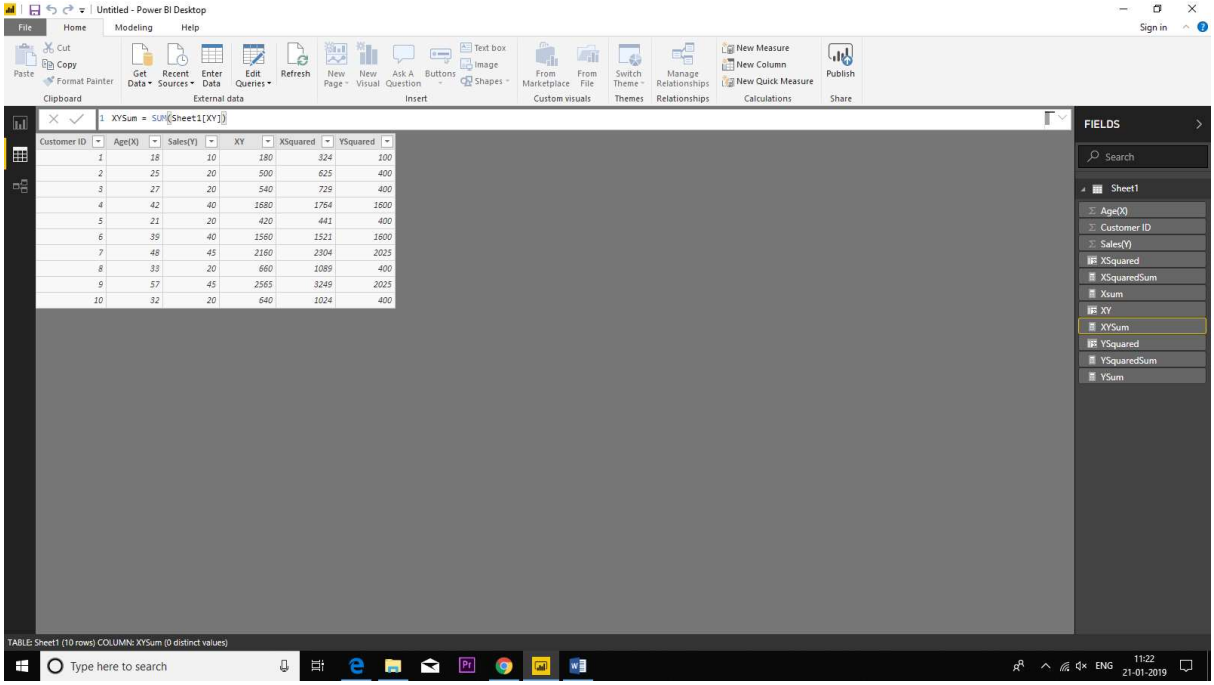
Step 3 : Right click on Fields→Sheet and add a new measure. Which may act as some constant values



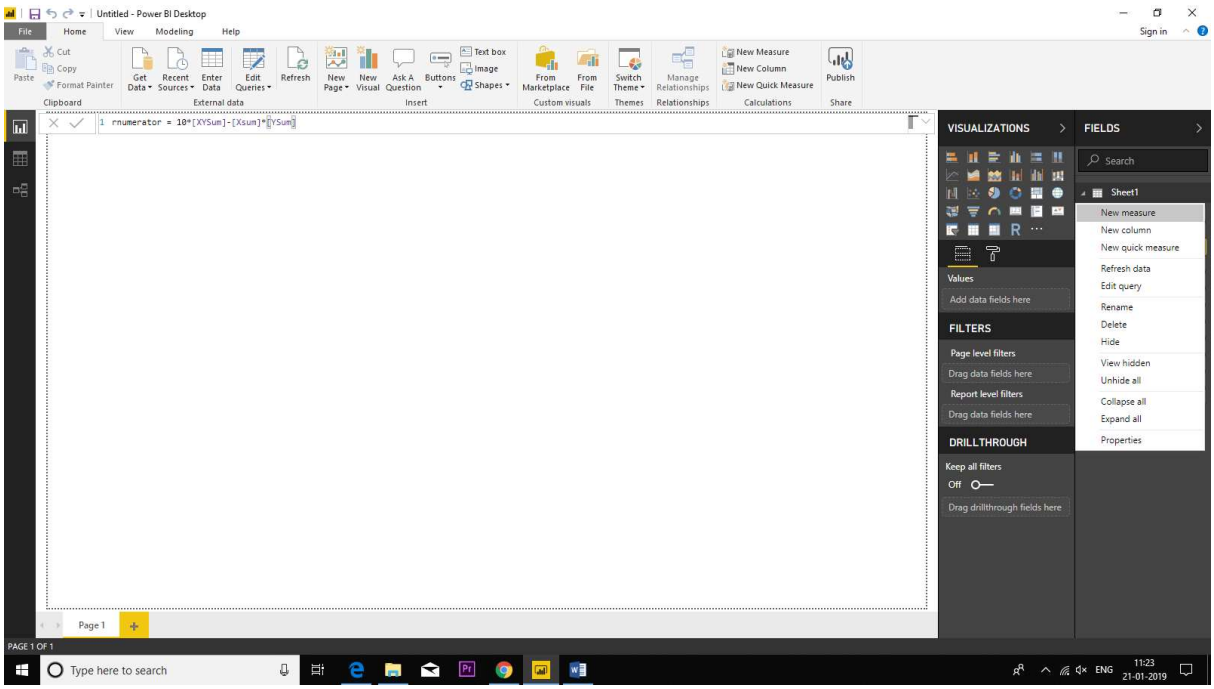

Step 4 : Calculate XSum.



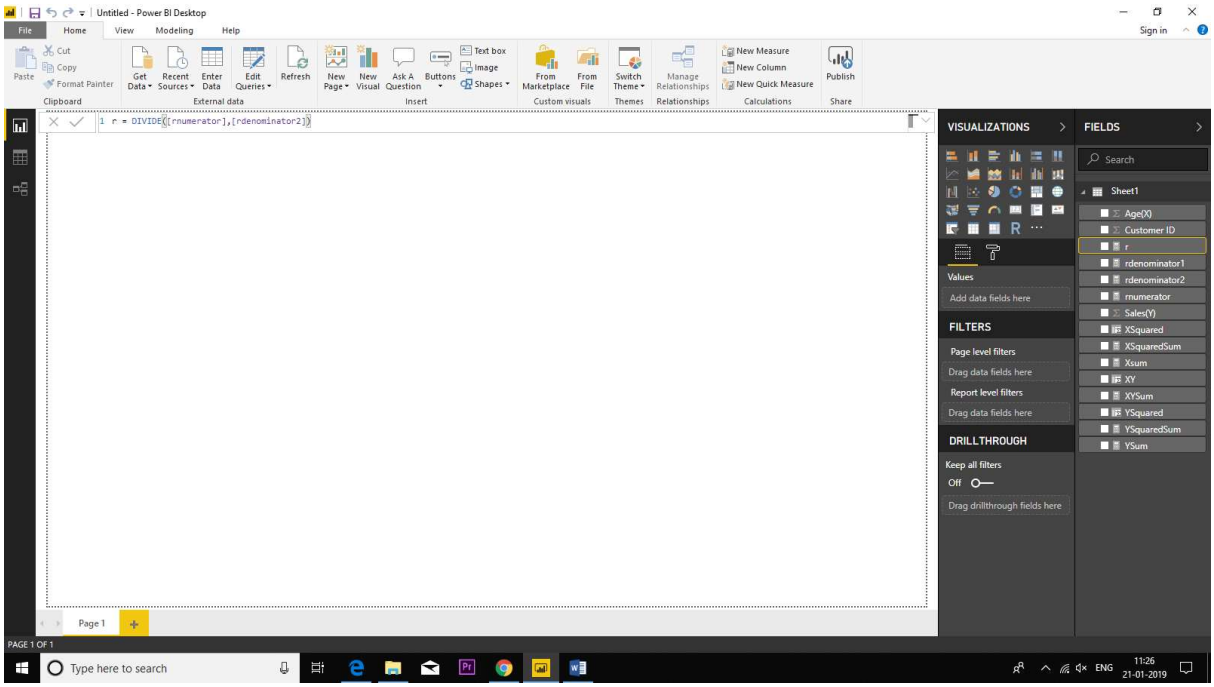
Step 5 : Calculate XYSum.



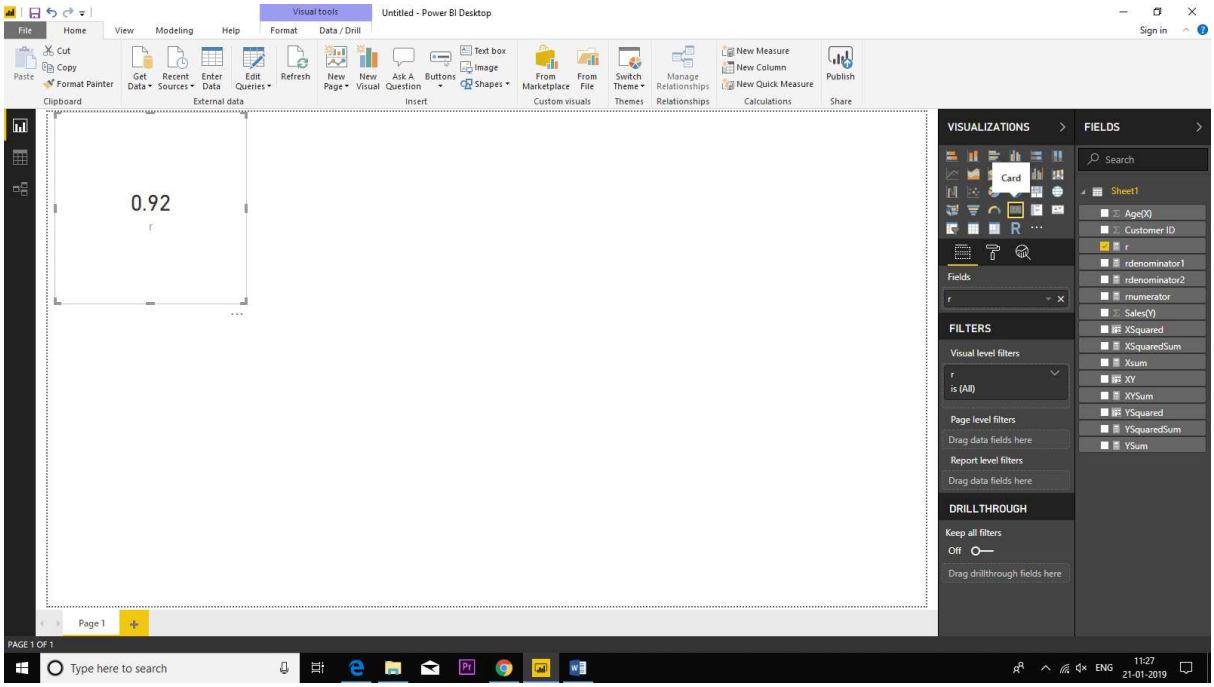

Step 6 : Calculate rnumerator.

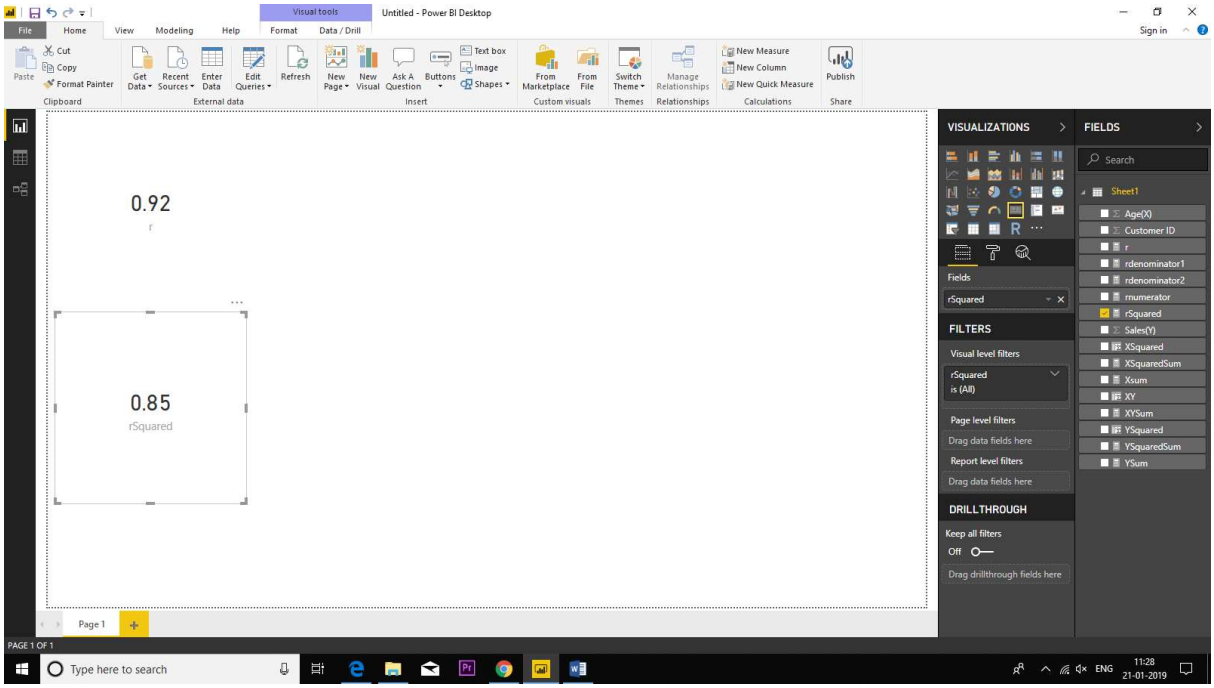


Step 7 : Calculate r.

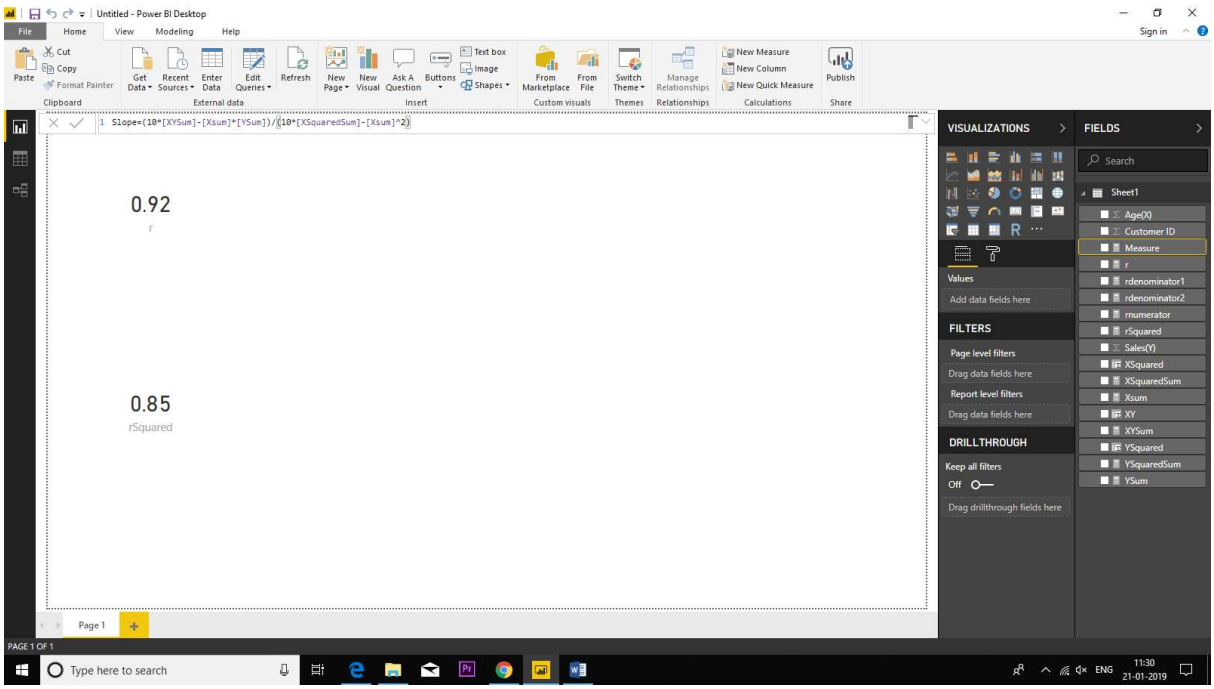



Step 8 : Select the Card Visualizations to view calculated results.

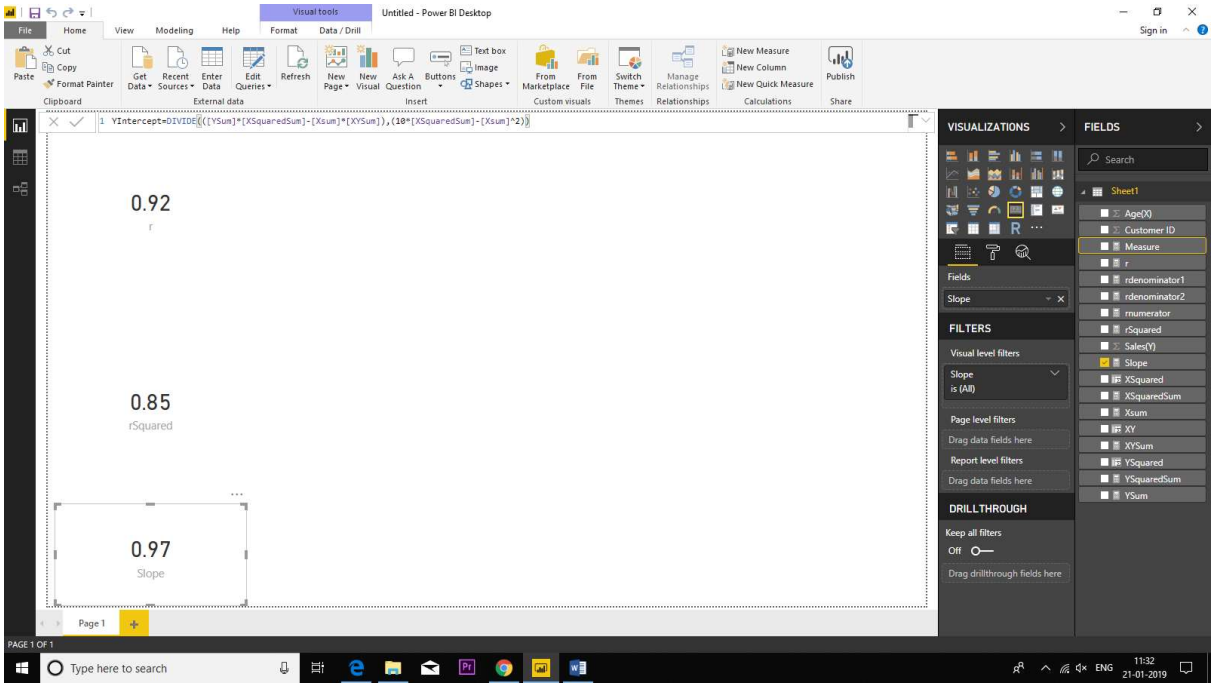




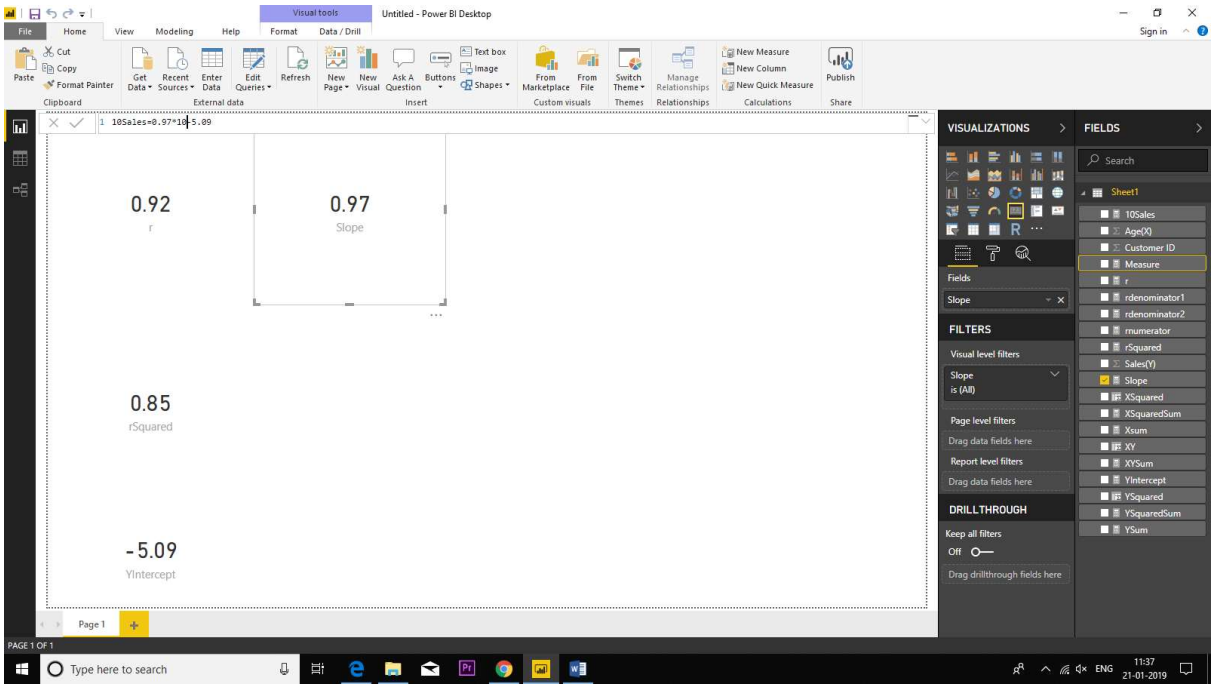

Step 9 : Calculate Slope.

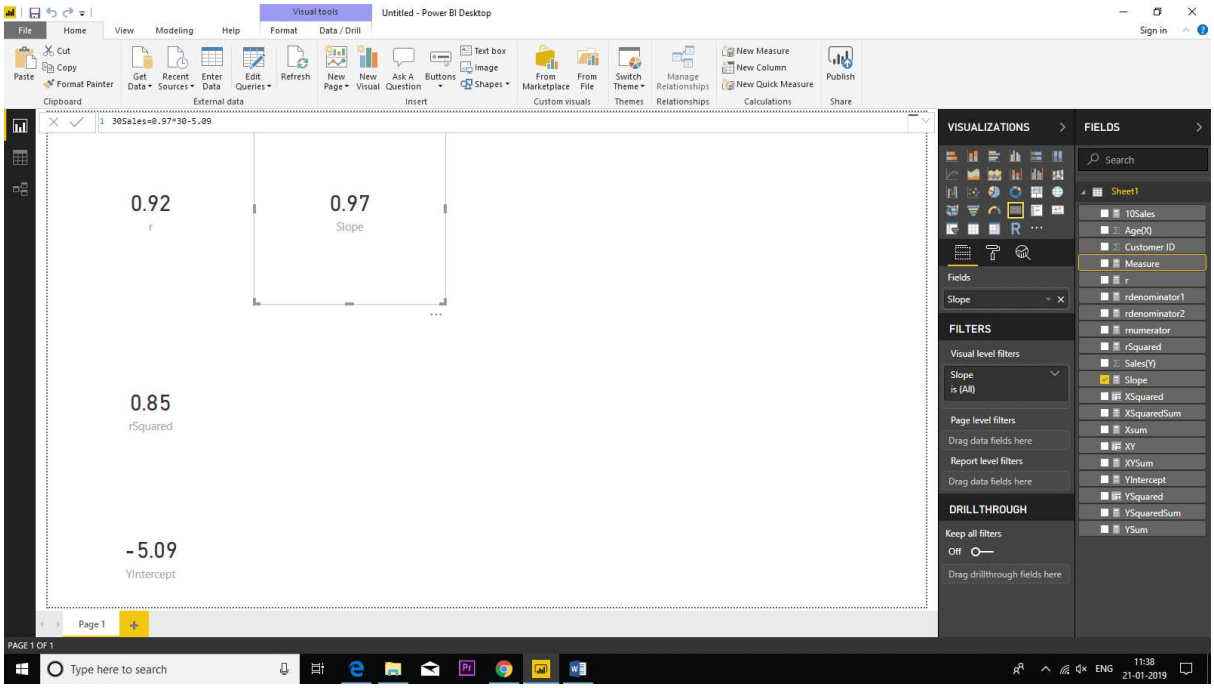


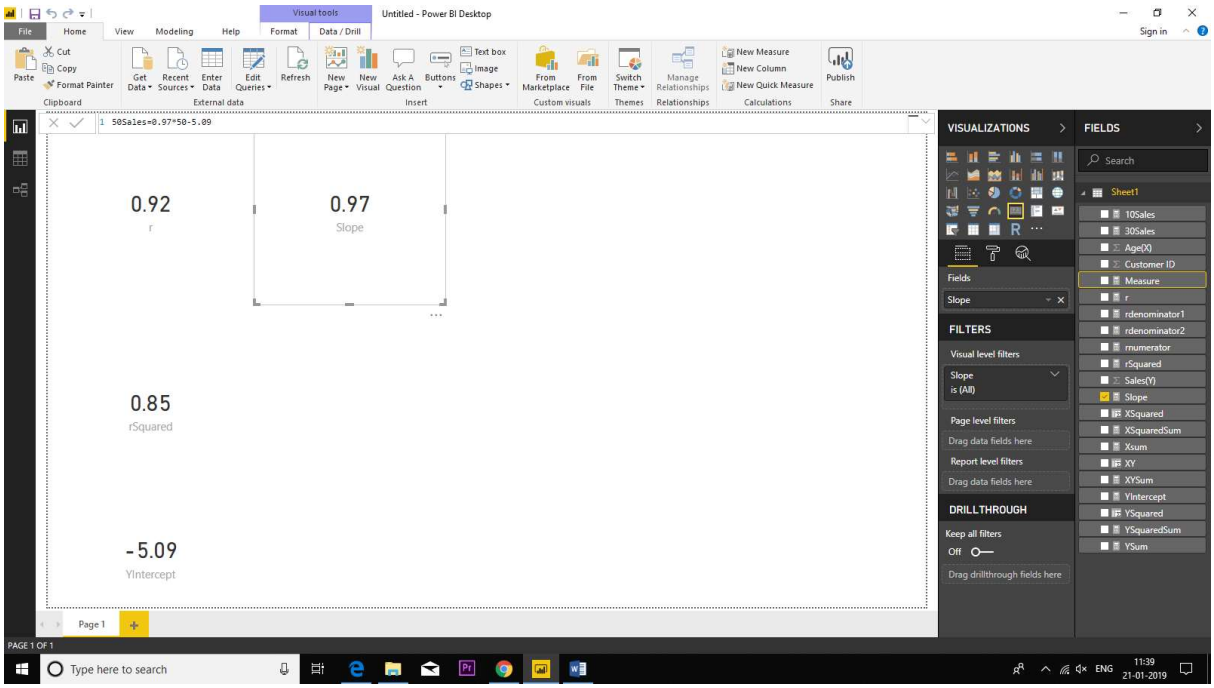
Step 10 : Calculate Y-Intercept.

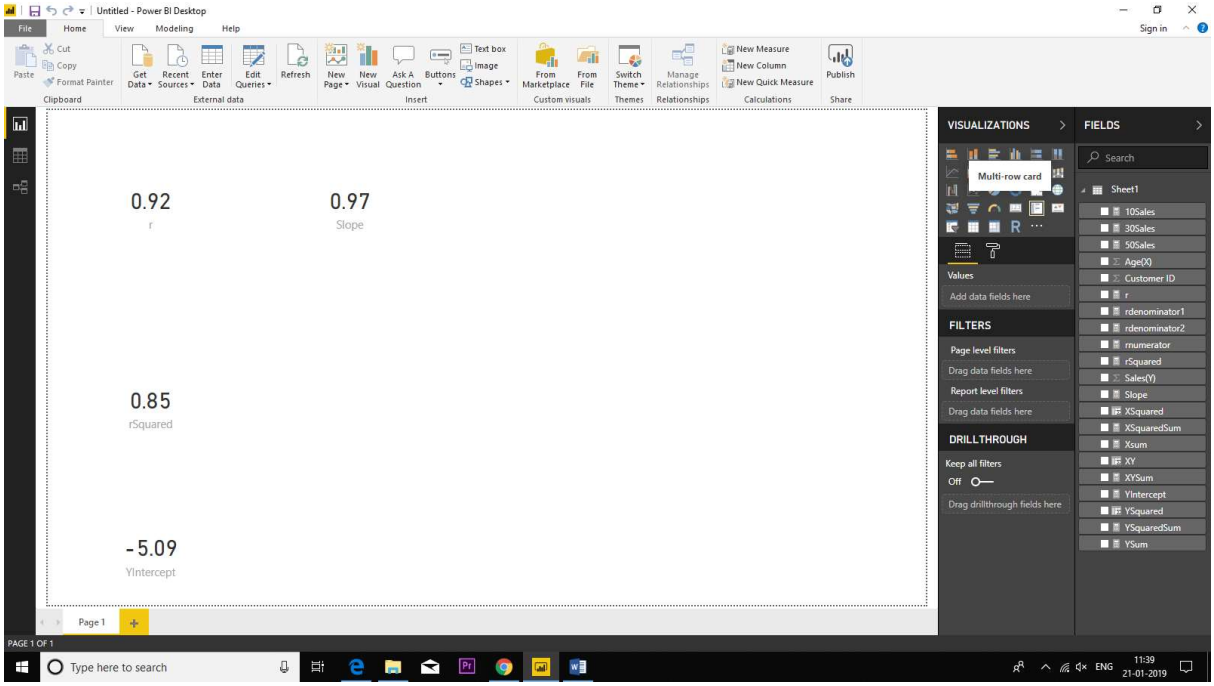


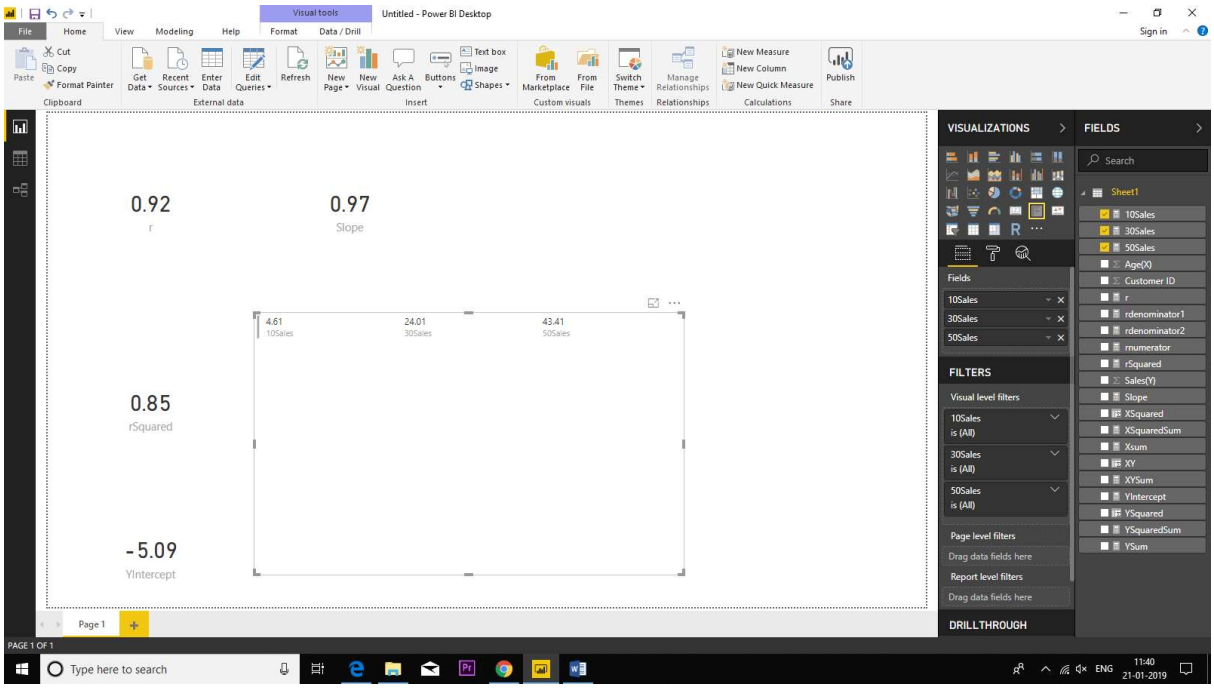

Step 11 : Use the Formula to Calculate the Linear Regression when Sales will be 10,30 and 50.


Untitled - Power BI Desktop
1 10Sales=0.97*10-5.09
0.92
r
0.97
Slope
0.85
rSquared
-5.09
YIntercept
Page 1
PAGE 1 OF 1
VISUALIZATIONS
FIELDS
Search
Sheet1
10Sales
Age(X)
Customer ID
Measure
r
rdenominator1
rdenominator2
rnumerator
rSquared
Sales(Y)
Slope
XSquared
XSquaredSum
Xsum
XY
XYSum
YIntercept
YSquared
YSquaredSum
YSum
Fields
Slope
FILTERS
Visual level filters
Slope is (All)
Page level filters
Drag data fields here
Report level filters
Drag data fields here
DRILLTHROUGH
Keep all filters
Off
Drag drillthrough fields here
Type here to search
ENG
11:37
21-01-2019

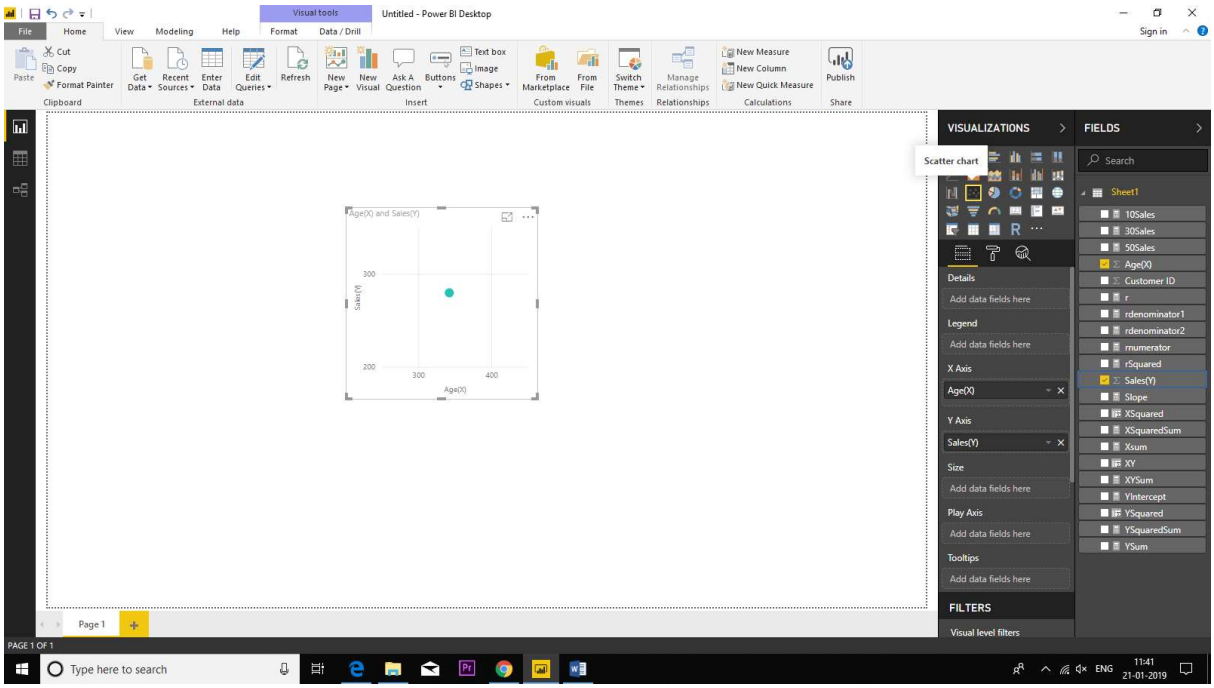

Untitled - Power BI Desktop
1 30Sales=0.97*30-5.09
0.92
r
0.97
Slope
0.85
rSquared
-5.09
YIntercept
Page 1
PAGE 1 OF 1
VISUALIZATIONS
FIELDS
Search
Sheet1
10Sales
Age(X)
Customer ID
Measure
r
rdenominator1
rdenominator2
rnumerator
rSquared
Sales(Y)
Slope
XSquared
XSquaredSum
Xsum
XY
XYSum
YIntercept
YSquared
YSquaredSum
YSum
Fields
Slope
FILTERS
Visual level filters
Slope is (All)
Page level filters
Drag data fields here
Report level filters
Drag data fields here
DRILLTHROUGH
Keep all filters
Off
Drag drillthrough fields here
Type here to search
ENG
11:38
21-01-2019


Untitled - Power BI Desktop
50Sales=0.97*50-5.09
0.92
r
0.97
Slope
0.85
rSquared
-5.09
YIntercept
Page 1
VISUALIZATIONS
FIELDS
FILTERS
DRILLTHROUGH
Type here to search

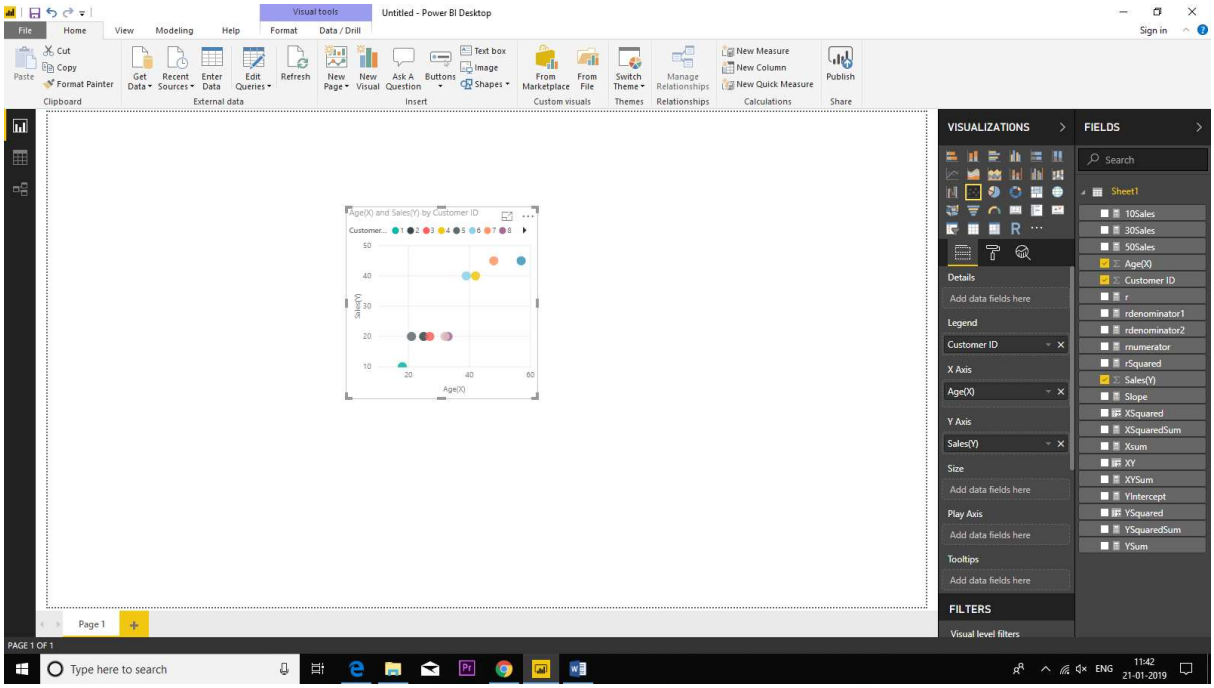

Untitled - Power BI Desktop
0.92
r
0.97
Slope
0.85
rSquared
-5.09
YIntercept
Page 1
VISUALIZATIONS
FIELDS
Multi-row card
FILTERS
DRILLTHROUGH
Type here to search




Step 12 : Select Scatter Chart from Visualizations.




Step 13 : Add Legend as Customer ID, X axis as Age and Y axis as Sales.



Step 14 : Select Trend Line to see the graph.