

# DATA ANALYTICS ASSINMENT-4

FIXED LOD:

THIS FUNCTION IS USED TO ALLOW USERS TO DEFINE A FIXED LEVEL OF DETAIL FOR PARTICULAR CALCULATION, REGARDLESS OF THE LEVEL OF DETAIL IN THEIR VIEW.

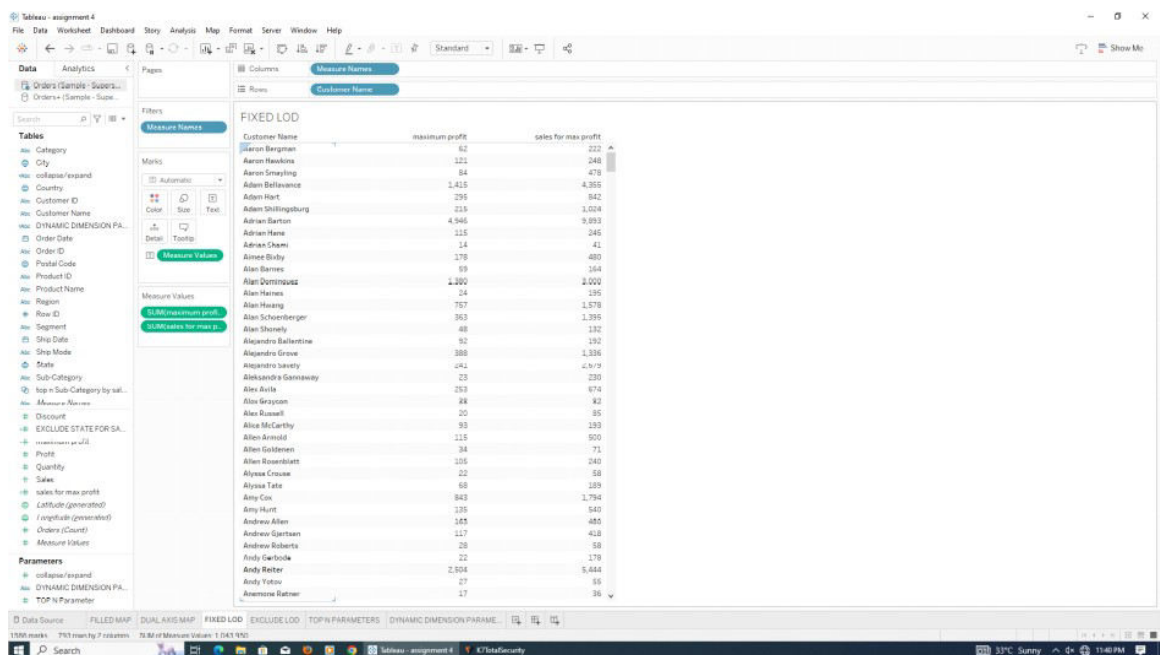
FOR THE BELOW VISUALIZATION, I HAD CREATED TWO CALCULATION FIELDS, ONE IS MAXIMUM PROFIT WITH FORMULA:

```
{ FIXED [Customer Name]: MAX([Profit]) }
```

AND ANOTHER ONE IS SALES FOR MAXIMUM PROFIT WITH FORMULA:

```
IF [Profit] = [maximum profit] THEN [Sales] END
```

AND I HAD TAKEN CUSTOMER NAME IN ROWS AND INSERTING OF MY CALCULATION FIELDS IN I GOT BELOW VISUALIZATION,



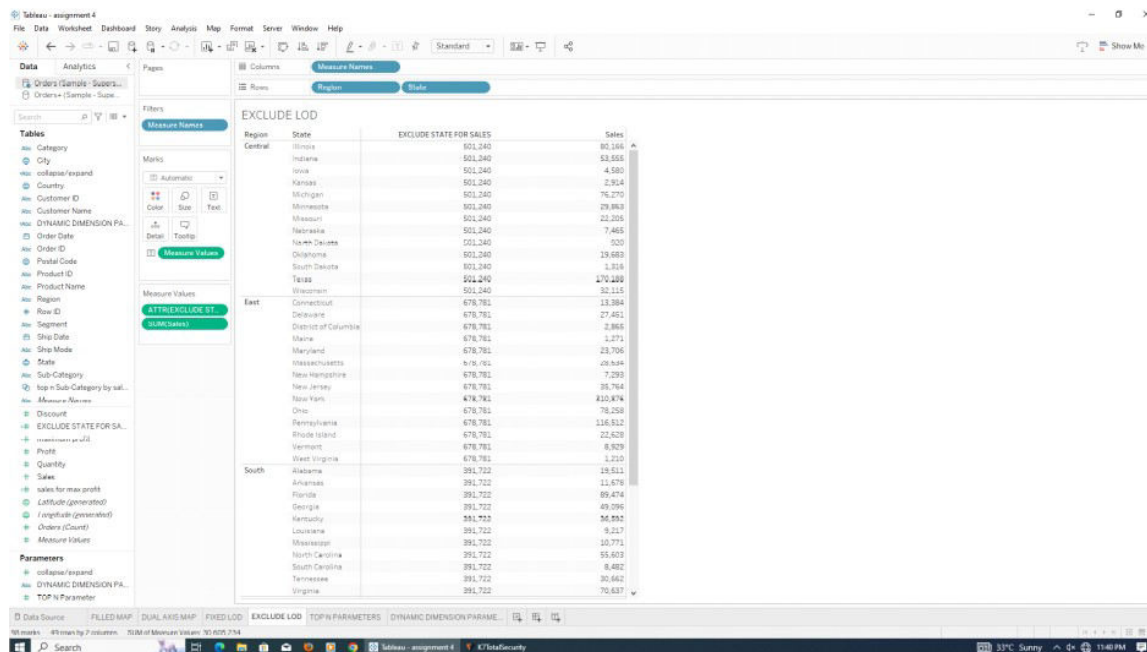
EXCLUDE LOD:

THESE FUNCTIONS ALLOW USERS TO EXCLUDE SPECIFIC FILES FROM THE

CALCULATION WHILE STILL PRESERVING THE LEVEL OF DETAIL OF THE VIEW. EXCLUDE LOD FUNCTIONS ARE USED TO PERFORM CALCULATIONS THAT EXCLUDE SPECIFIC FIELDS BUT STILL NEED TO PRESERVE THE LEVEL OF DETAIL IN THEIR VIEW.

FOR THE BELOW VISUALIZATION, I HAD TAKEN A CALCULATION FIELD AND NAMED AS EXCLUDE STATES FOR SALES WITH THE FORMULA :  
`{ EXCLUDE [State]: SUM([Sales]) }`

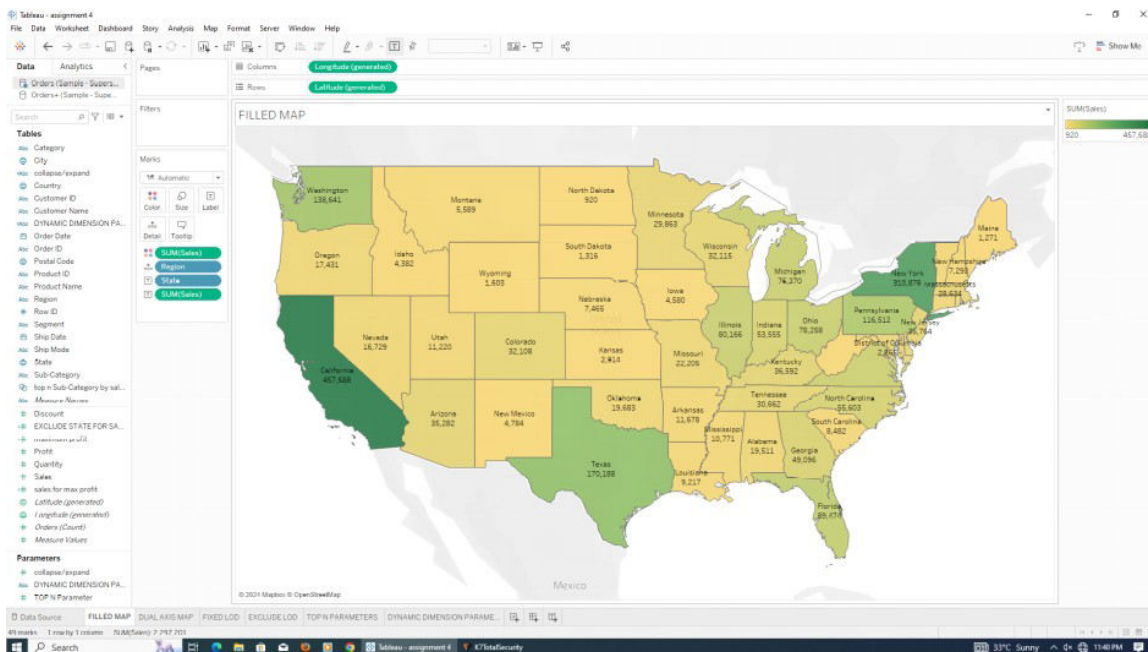
AND DRAGGED REGION AND STATES INTO THE ROWS AND APPLIED THE MY CALCULATION AND I GOT BELOW VISUALIZATION



FILLED MAPS:

FILLED MAP VISUALIZATION IS A METHOD OF GEOGRAPHICALLY REPRESENTING NUMERICAL DATA WHERE THE VALUE OF EACH DATA POINT IS INDICATED USING COLORS.

IN THIS FILLED MAP LONGITUDE VALUE IS TAKEN IN COLUMN FIELD AND LATITUDE VALUE IS TAKEN IN ROW FIELD THEN WE GET RESULTANT FILLED MAP. HERE WE CAN OBSERVE THAT THE SALES VALUES ARE REPRESENTED WITH DIFFERENT SHADES OF COLOURS RESPECTED TO DIFFERENT AREAS. BELOW VISUALIZATION IS FILLED MAP.

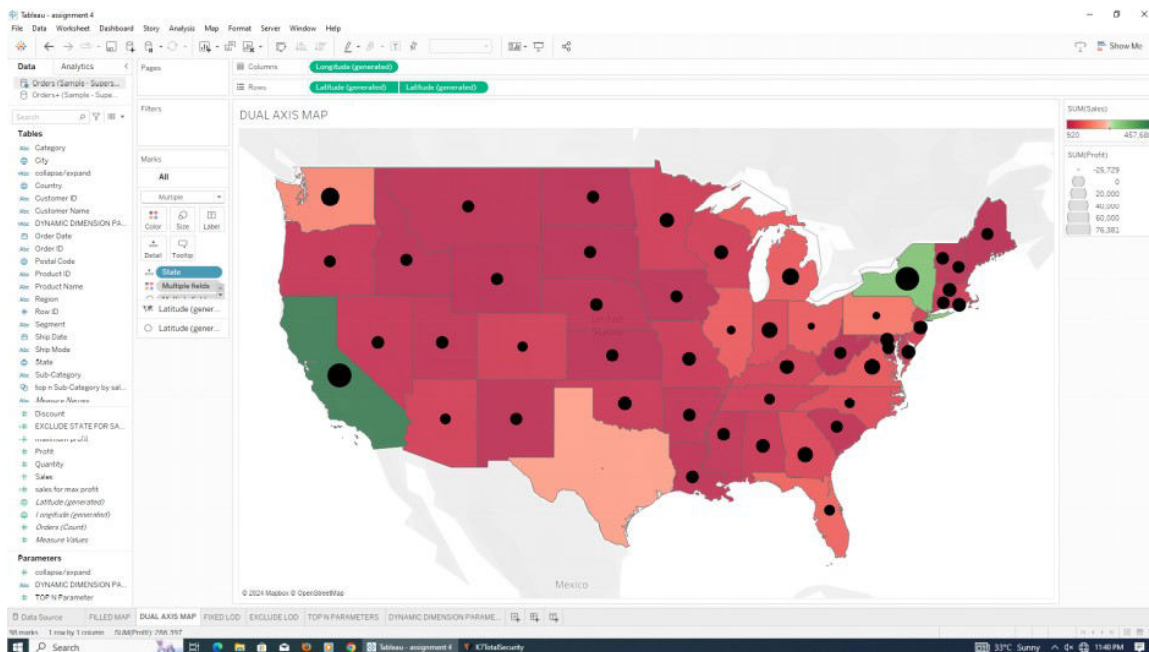


## DUAL AXIS MAP:

DUAL AXIS MAP IS TWO SETS OF GEOGRAPHICAL DATA OVERLID ON TOP OF ONE ANOTHER.

TO CREATE DUAL AXIS MAP WE USE LONGITUDE IN COLUMN AND LATITUDE IN ROW AS WELL AS MULTIPLE FIELDS IN COLORS, STATE FIELD AND COUNTRY IN DETAIL THEN WE GET THE RESULTANT OF DUAL AXIS MAP

DUAL AXIS MAP VISUALIZATION SHOWN BELOW,



## TOP N PARAMETERS:

A TOP N PARAMETER RETURNS DATA ACORDING TO A NUMBER YOU ASSIGN IT, HENCE THE N IN THE NAME.

FOR THE BELOW VISUALIZATION, I HAD TWO PARAMETERS , ONE IS TOP N PARAMETER AND ANOTHER PARAMETER IS COLLAPSE/EXPAND TO ARRANGE THE VISUALIZTION IN ORDER MANNER OR COMBINED MANNER.

AND AFTER THAT I HAD CREATED ONE SET , TOP N PARAMETER SET WITH BY FILED TOP AND TOP WITH TOP N VALUES.

AND AFTER I HAD CREATED A CALCULATION FIELD, COLLAPSE/EXPAND CALCULATION FILED WITH FORMULA:

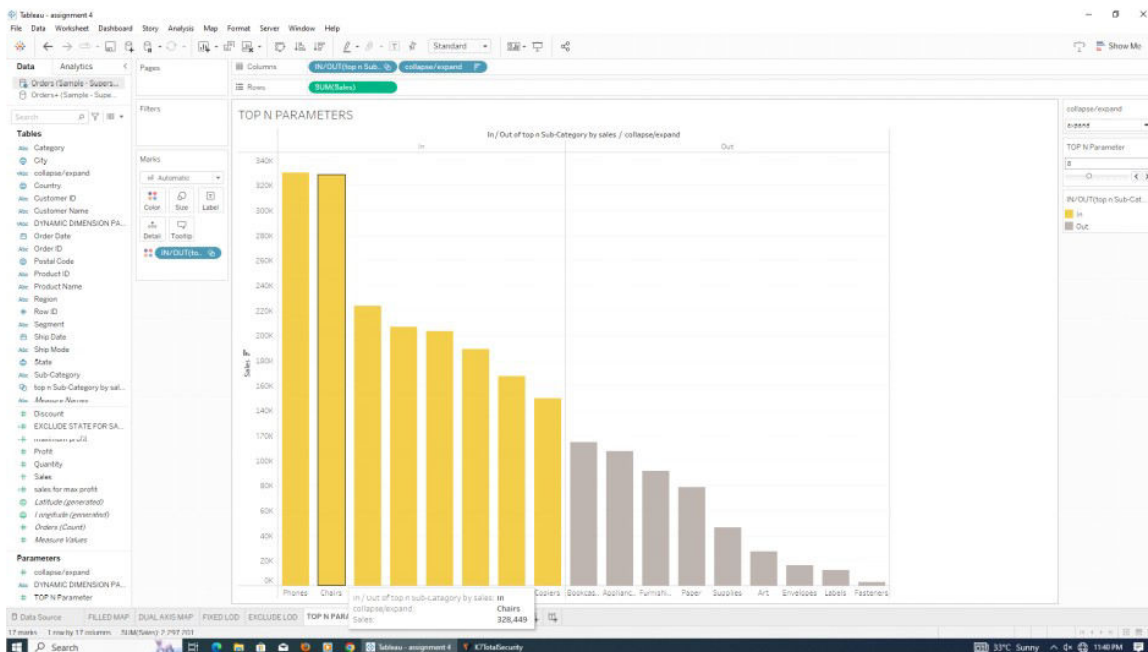
IF [Parameters].[collapse/expand] = 0 THEN

IF [top n Sub-Category by sales] THEN [Sub-Category]

ELSE 'others' END

ELSE [Sub-Category] END

BELOW VISUALIZATION IS TOP N PARAMETER ,



DYNAMIC DIMENSION PARAMETER:

DIMENSIONS CONTAINS QUALITATIVE VALES SUCH AS NAMES,DATES OR GEOGRAPHICAL DATA.

WE CAN USE DIMENSIONS TO CATEGORIZE,SEGMENT, AND REVEAL THE DETAILSIN YOUR DATA.DIMENSIONS EFFECT THE THE LEVEL OF DETAIL IN THE VIEW.

FOR THE BELOW VISUALIZATION, I HAD CREATED A PARAMETER WITH VALUES AND DISPLAYS AS CATEGORY AND SUB-CATEGORY AND NAMED THE PARAMETER AS DYNAMIC DIMENSION PARAMETER.

AND AFTER THAT I HAD CREATED CALCULATION FIELD AS DYNAMIC DIMENSION PARAMETER WITH THE FORMULA:

```
IF [Parameters].[DYNAMIC DIMENSION PARAMETER]= 'CATEGORY' THEN [Category]
ELSEIF [Parameters].[DYNAMIC DIMENSION PARAMETER]='Sub-Category' THEN [Sub-Category]
END
```

AND TAKEN SALES INTO THE COLUMN AND DRAGED DYNAMIC DIMENSION PARAMETER CALCULATION FIELD INTO ROWS

BELOW VISUALIZATION IS DYNAMIC DIMENSION PARAMETER,

