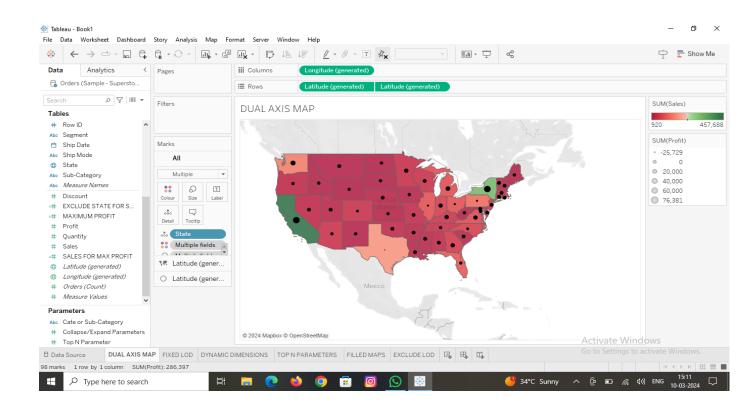
DATA ANALYTICS – ASSIGNMENT 4

1.DUAL AXIS MAP

- **♦**DUAL AXIS MAP IS A MAP WITH TWO SETS OF GEOGRAPHICAL DATA OVERLAID ON TOP OF ONE ANOTHER.
- ◆TO CREATE DUAL AXIS MAP WE USE LONGITUDE IN COLUMN AND LATITUDE IN ROWS AS WELL AS MULTIPLE FIELDS IN COLOR, STATE FIELD AND COUNTRY IN DETAIL THEN WE GET THE RESULTANT DUAL AXIS MAP.
- ♦ WITH THIS DUAL AXIS LAYERED MAP, USERS CAN EASILY TELL WHICH STATE GENERATED MORE PROFIT AND QUANTITY WHILE AT THE SAME TIME TELL THE LEADING CITIES WITHIN THOSE HIGH PERFORMING STATES.



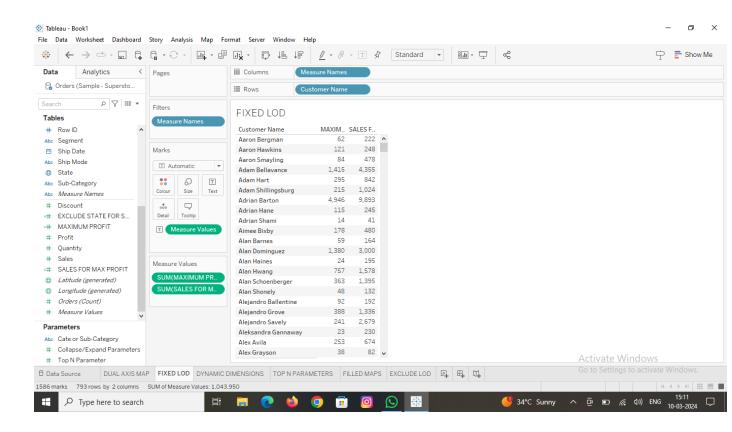
2.FIXED LOD

- ◆ THIS FUNCTION IS USED TO ALLOWS USERS TO DEFINE A FIXED LEVEL OF DETAIL FOR PARTICULAR CALCULATION, REGARLESSS 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]) }

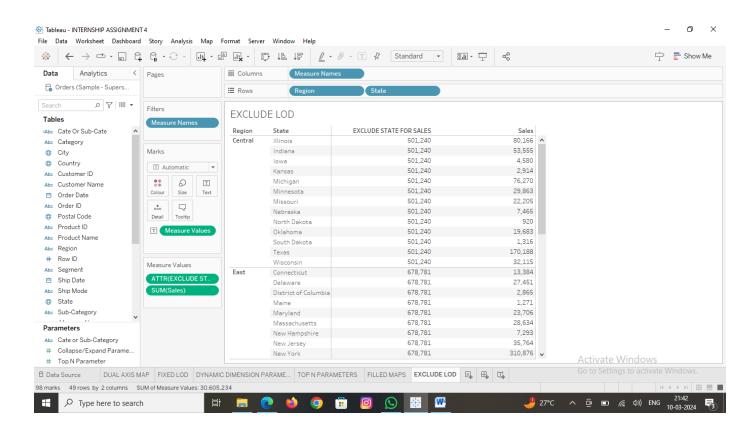
- ◆ AND ANOTHER ONE IS SALES FOR MAXIMUM PROFIT WITH FORMULA :

 IF [PROFIT]=[MAXIMUM PROFIT] THEN [SALES] END
- ◆ AND I HAD TAKEN CUSTOMER NAME IN ROWS AND MEASURE NAME IN COLUMNS AND INSERTING OF MY CALCULATION FIELDS IN I GOT BELOW VISUALIZATION.



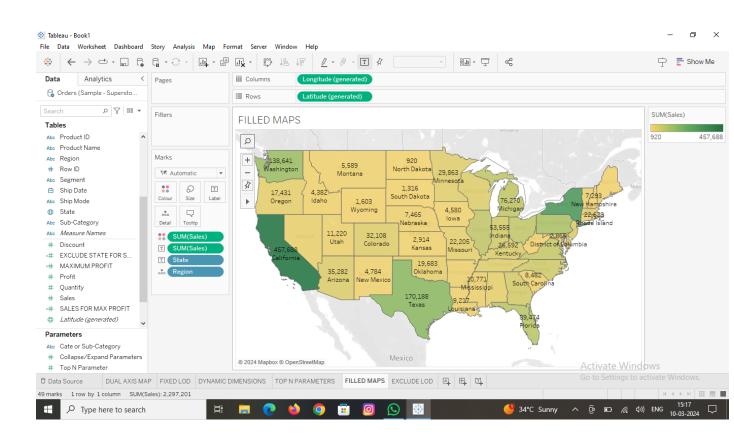
3.EXCLUDE LOD

- ♦ THIS FUNCTIONS ALLOW USERS TO EXCLUDE SPECIFIC FILEDS FROM THE CALCULATION STILL PRESERVING THE LEVEL OF DETAIL OF THE VIEW. EXCLUDE LOD FUNCTIONS ARE USED TO PERFORM CALCULATIONS THAT EXCLUDE SPECIFIC FILEDS BUT STILL NEED TO PERSERVE THE LEVEL OF DETAIL IN THIER VIEW.
- ♦ FOR THE BELOW VISUALISATION, I HAD TAKE A CALCULATION FIELD AND NAMED AS EXCLUDE STATES FOR SALES WITH THE FORMULA:
- { EXCLUDE [State]: SUM([Sales]) }
- ◆ AND DRAGED REGION AND STATES INTO THE ROWS AND MEASURE NAME IN THE COLUMN APPLIED MY CALCULATION AND I GOT BELOW VISUALIZATION



4.FILLED MAPS

- ◆ FILLED MAP VISUALIZATION IS A METHOD OF GEOGRAPHICALLY REPRESENTING NUMERCIAL DATA WHERE THE VALUE O 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 FILED 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.



5.DYNAMIC DIMENTION 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 EVEL 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 CATE OR SUB CATE .
- ♦ AND AFTER THAT I HAD CREATED CALCULATION FIELD AS DYNAMIC DIMENSION PARAMETER WITH THE FORMULA:

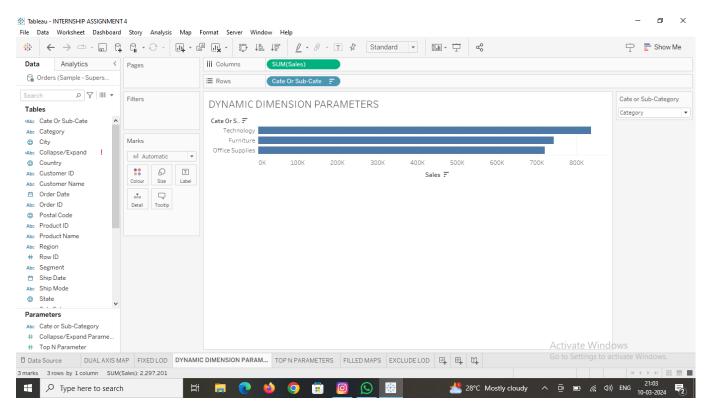
IF [Parameters].[DYNAMIC DIMENSION PARAMETER]= 'CATEGORY' THEN [Category]

ELSEIF [Parameters].[DYNAMIC DIMENSION PARAMETER]='Sub-Category' THEN [Sub-Category]

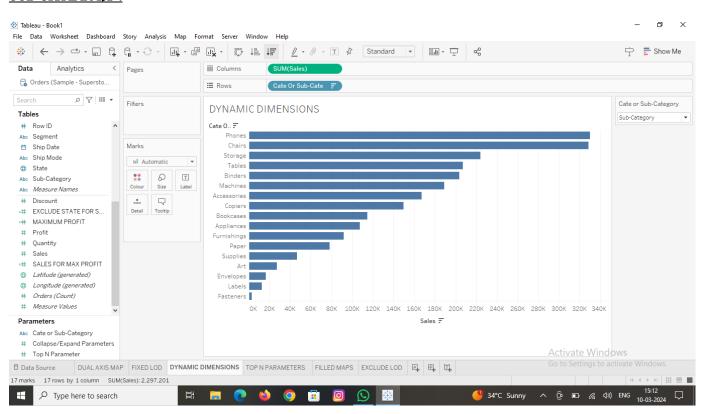
END

- ♦ AND TAKEN SALES INTO THE COLUMN AND DRAGED CATE OR SUB-CATE CALCULATION FIELD INTO ROWS
- **◆**BELOW VISUALIZATION IS DYNAMIC DIMENSION PARAMETER,

CATEGORY:



SUB CATEGORY:



6.TOP N PARAMETERSS

- **◆** 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 VISUALISATION IN ORDER MANNER OR COMBINED MANNER.
- ◆ AFTER THAT I HAD CREATED ONE SET i.e., TOP N SUB-CATEGORY BY SALES SET WITH BY FILED TOP AND TOP WITH TOP N PARAMETER VALUES AND THEN SELECT SALES AND SUM BELOW THE BY FIELD AND AFTER I HAD CREATED A CALCULATION FIELD WITH SUB CATEGORY AND NAMED IT AS COLLAPSE/EXPAND CALCULATION FILED WITH FORMULA:

IF [COLLAPSE/EXPAND PARAMETERS] = 0 THEN

IF [TOP N SUB-CATEGORY BY SALES] THEN [SUB-CATEGORY]

ELSE 'OTHERS' END

ELSE [SUB-CATEGORY] END

◆THEN I HAVE DRAGEDAND PLACED THE TOP N SUB-CATEGORY BY SALES SET AND COLLAPSE AND EXPAND CALCULATION FIELD IN COLUMNS AND SUM (SALES) IN ROWS. ◆BELOW VISUALIZATION IS TOP N PARAMETER,

