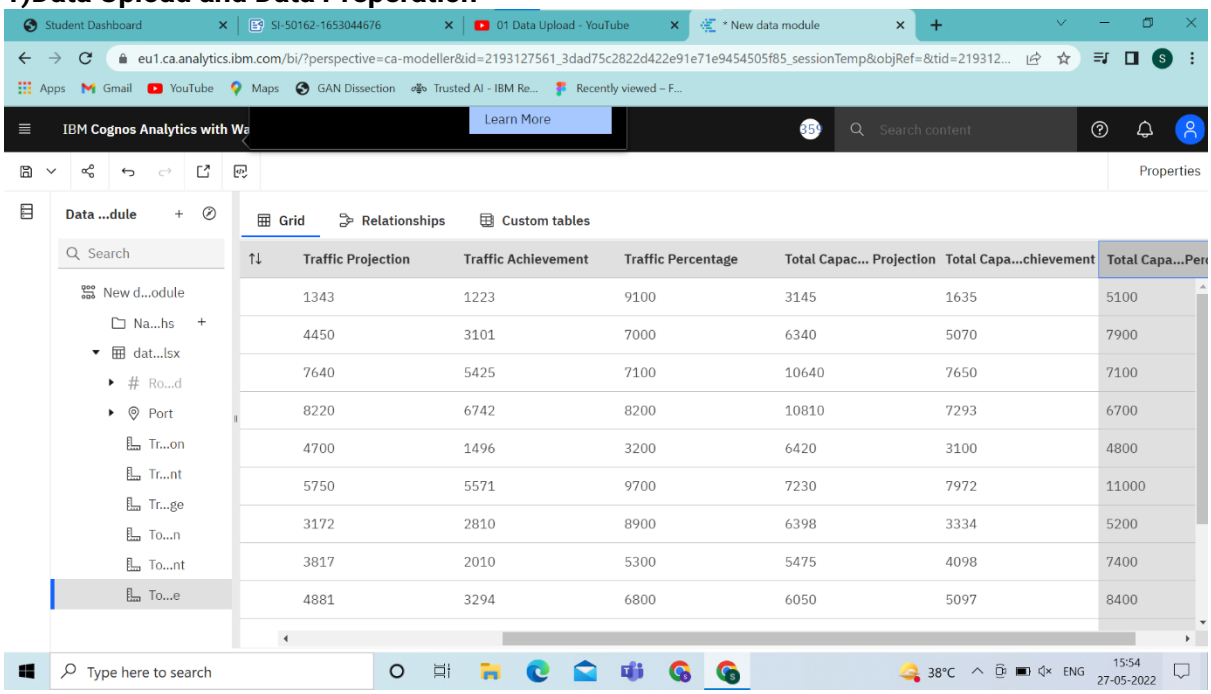
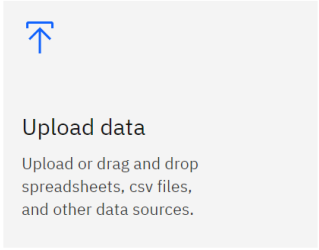
NAME:Snigdha Singh **REG.NO.:20BCE0545**

DATA ANALYTICS: **Major Port Traffic And Capacity Analytics Using IBM Cognos Analytics**

1)Data Upload and Data Preperation

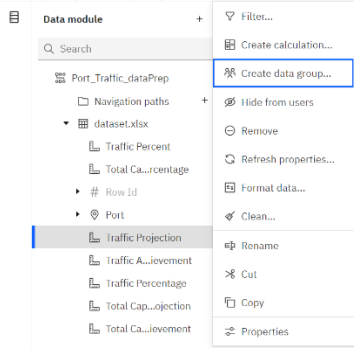


->I went to ibm.com logged in using my credentials and launched data analytics using watson and pressed on the upload data option



->I selected the dataset I wanted (dataset.xslx)

->Next we renamed the columns as given in the project details to rename we selected the three dots and go to the rename option and rename it to whatever we want similarly we need to do it for all the columns

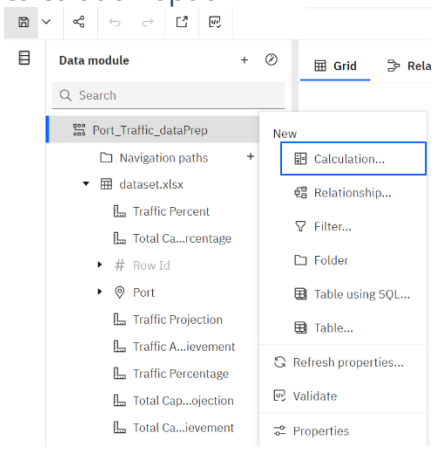


2)Preparing Calculations

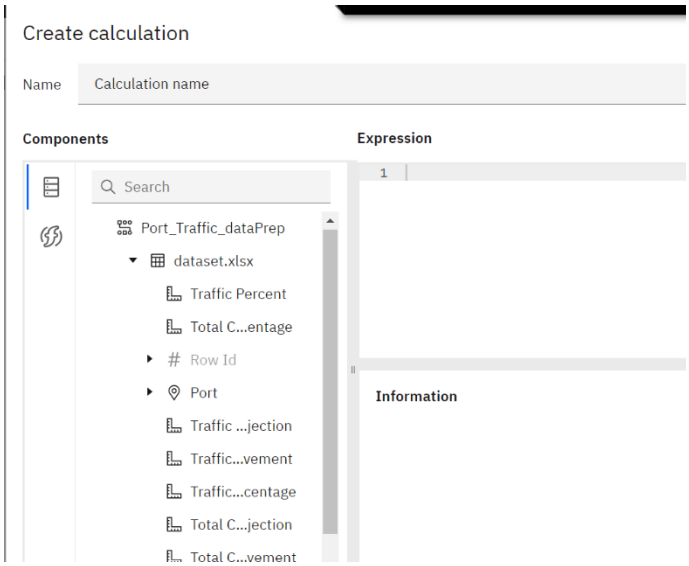
i. Traffic Percentage as
Traffic Achievement / Traffic Projection

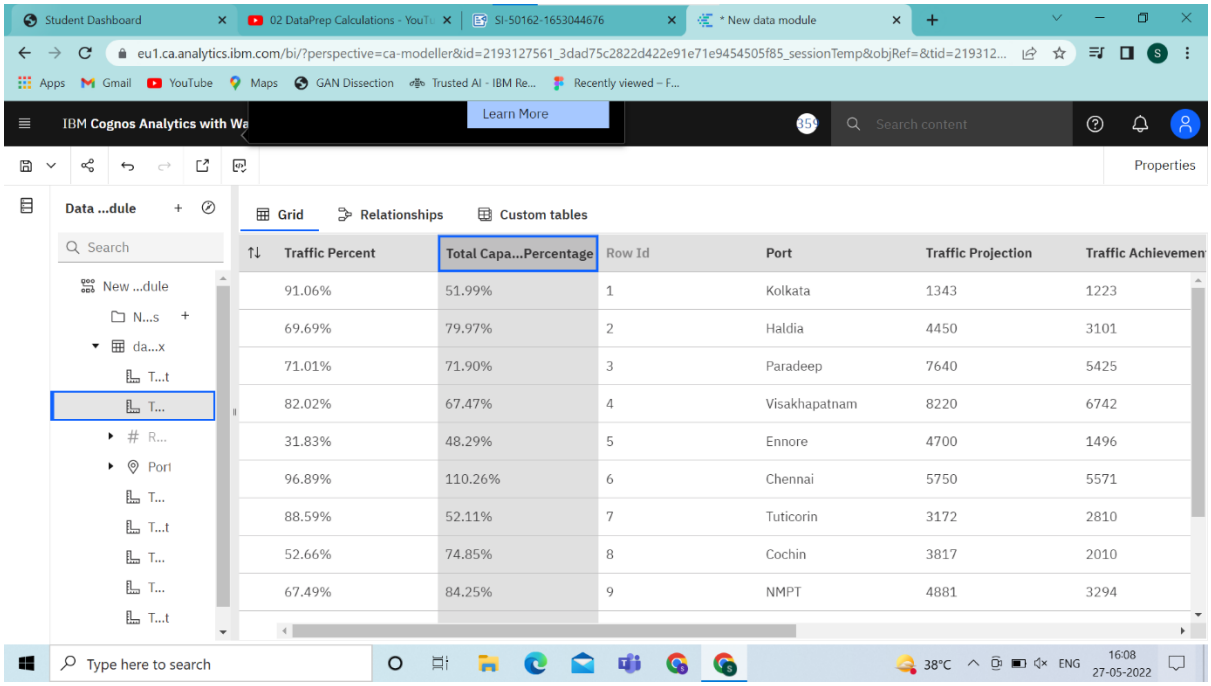
ii. Total Capacity Percentage as
Total Capacity Achievement / Total Capacity Projection

To do this we need to go to the new module option and right click here then press on calculation option



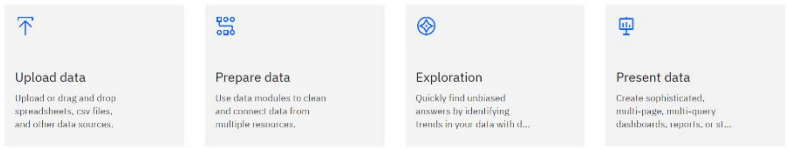
In the calculation option include the columns that are required for the calculation (drag and drop) and then rename the new column at the end validate the calculation and the press create

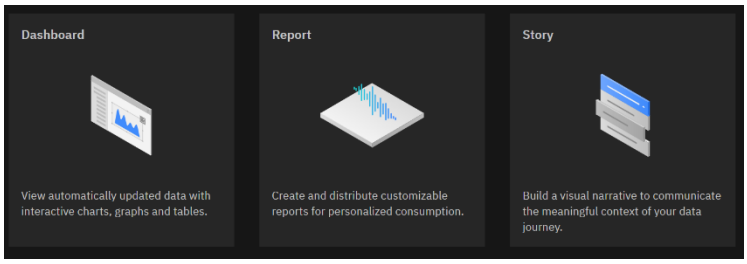




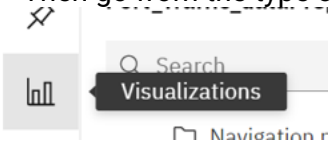
How to make visualizations

->Go to Present data option and select the dashboard





->Then go from the type of dashboard select the one suitable for your visualisation



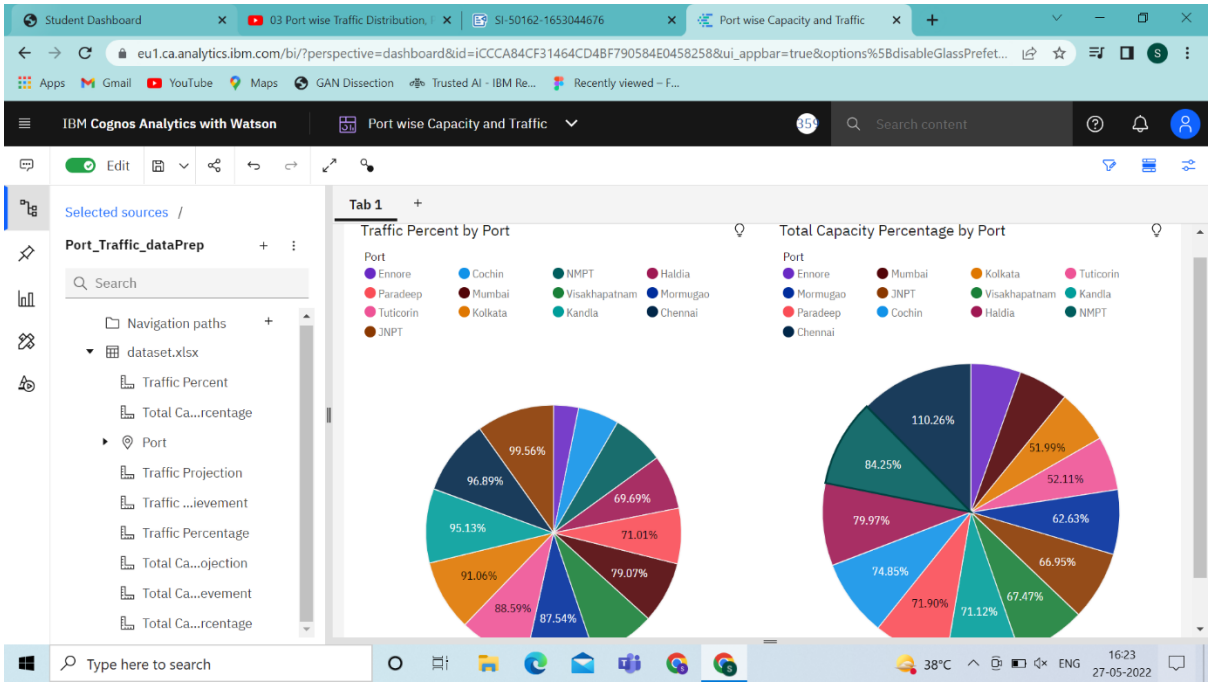
->After selecting the visualization to be used add the columns based on utility to all the blanks in the visualizations

->Go to properties option to add any new properties to the respective charts and you will have the final result

Port wise Traffic and Capacity Distribution

Link to DashBoard:

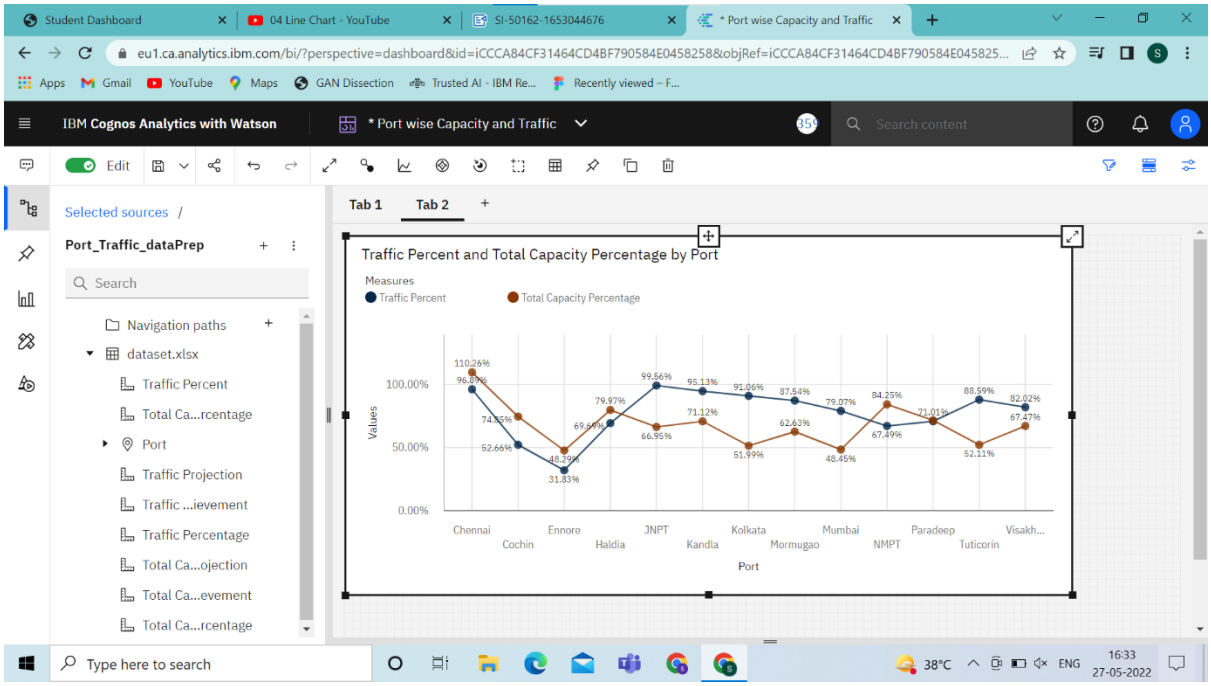
https://eu1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FPort%2Bwise%2BCapacity%2Band%2BTraffic&action=view&mode=dashboard&subView=model00000181051e1691_00000000



Port-Wise Traffic Vs Capacity By Line Chart

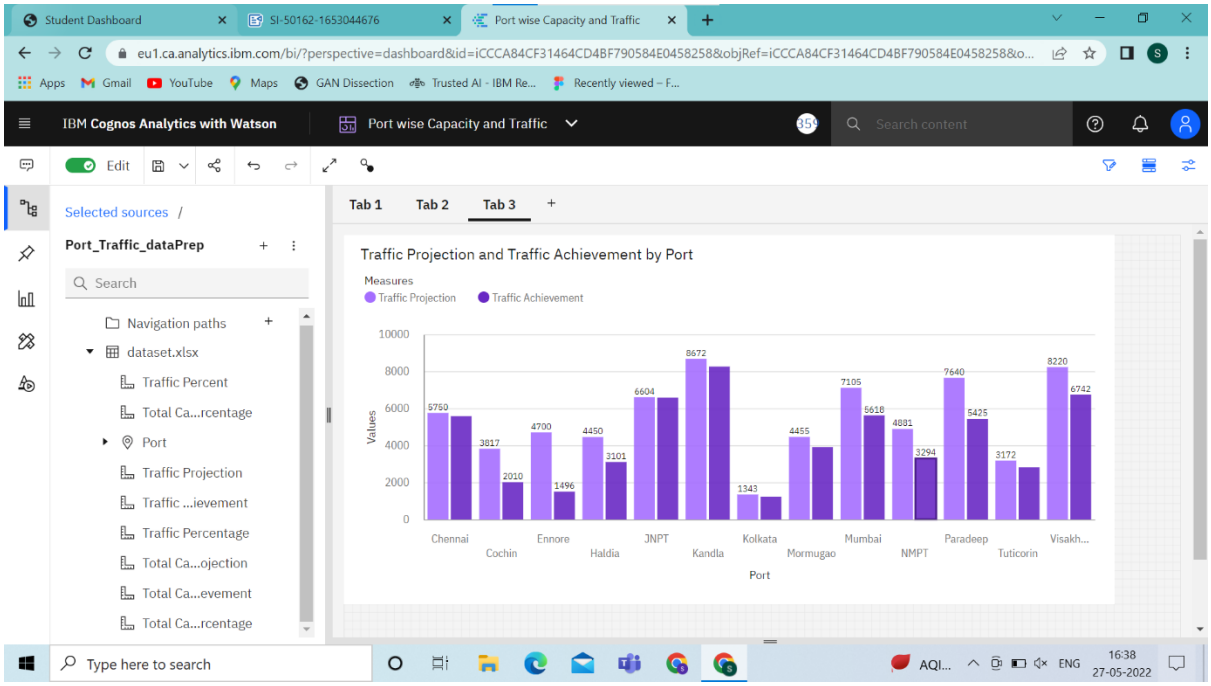
Link to dashboard:

https://eu1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FPort%2Bwise%2BCapacity%2Band%2BTraffic&action=view&mode=dashboard&subView=model000001810527bd28_00000000



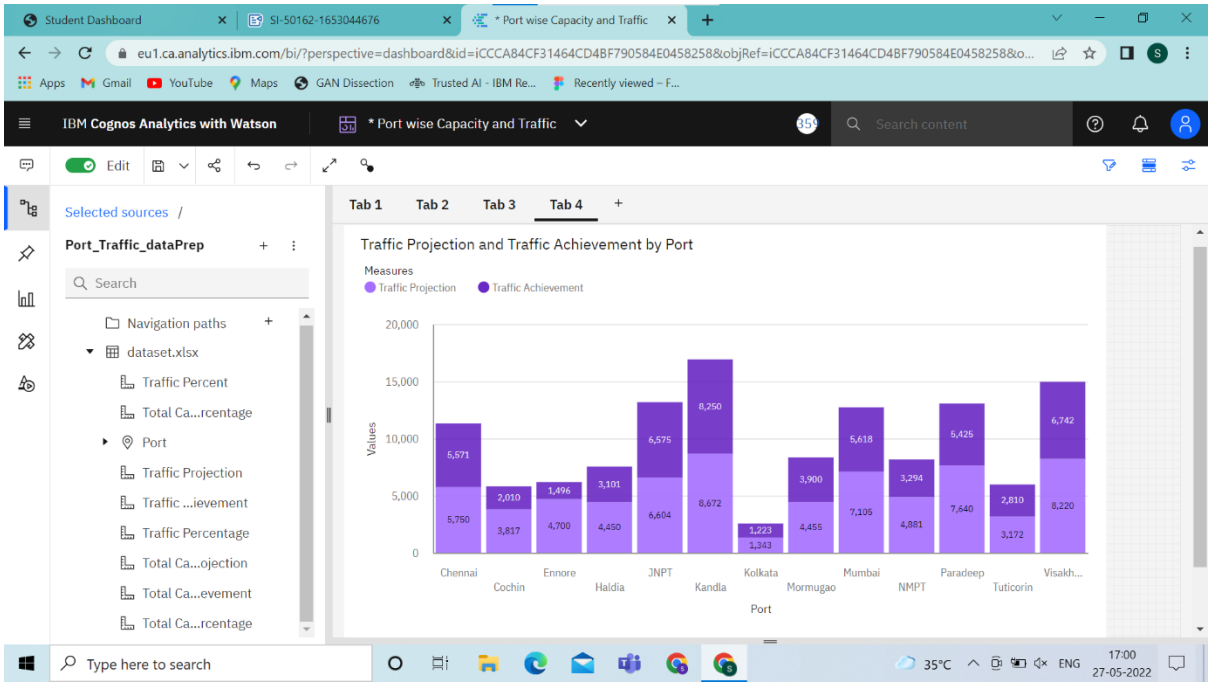
Port-Wise Traffic Projected Vs Achieved By Column Chart

Link to dashboard:https://eu1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FPort%2Bwise%2BCapacity%2Band%2BTraffic&action=view&mode=dashboard&subView=model0000018105312937_00000000



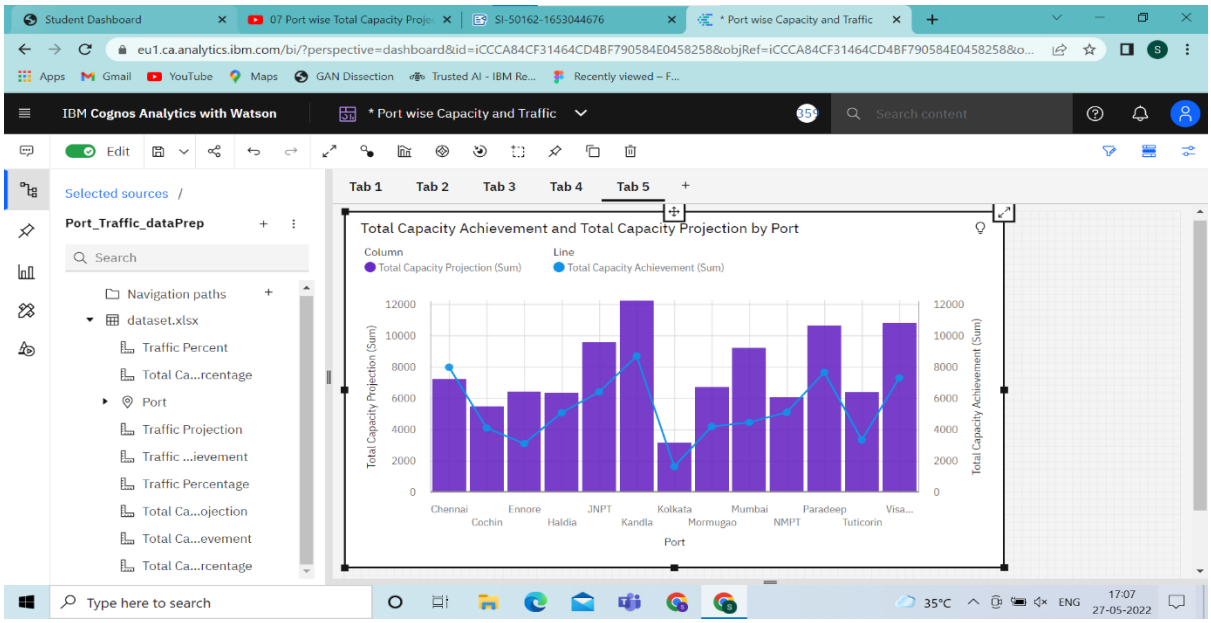
Port-Wise Traffic Projected Vs Achieve By Stacked Column Chart

Link to dashboard:https://eu1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FPort%2Bwise%2BCapacity%2Band%2BTraffic&action=view&mode=dashboard&subView=model0000018105376132_00000000



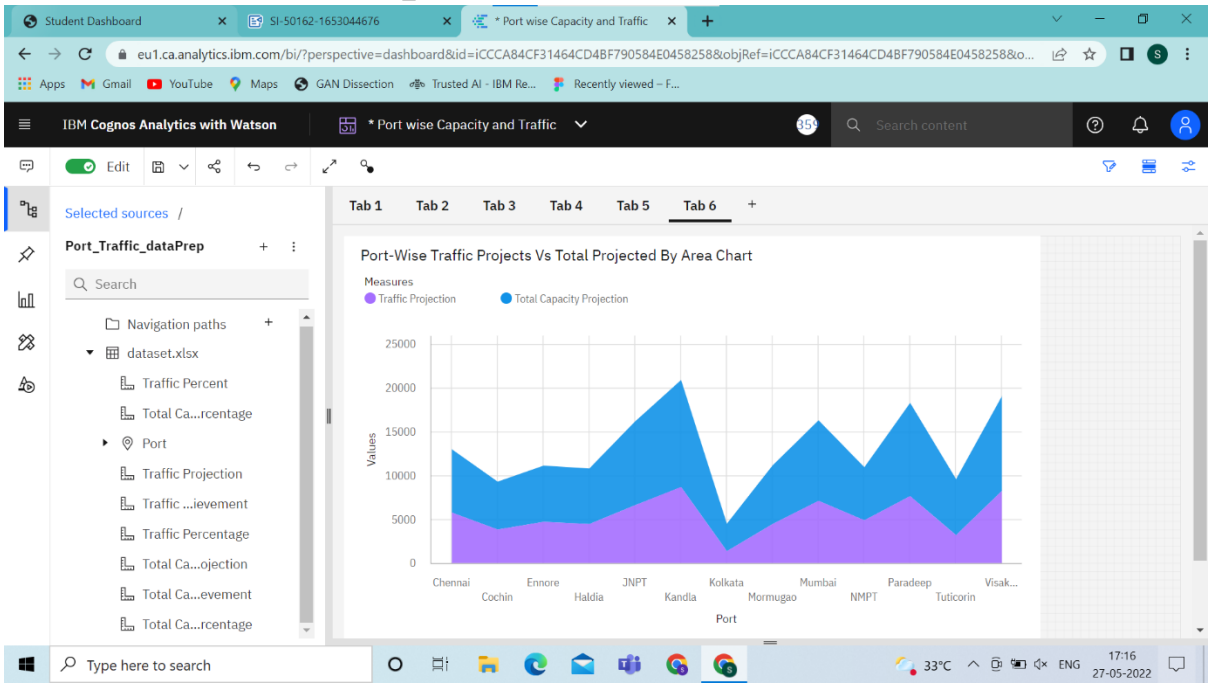
Port-Wise Total Capacity Projects Vs Total Capacity Achieve By Line And Bar Chart

Link to dashboard:https://eu1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FPort%2Bwise%2BCapacity%2Band%2BTraffic&action=view&mode=dashboard&subView=model000001810549a691_00000000



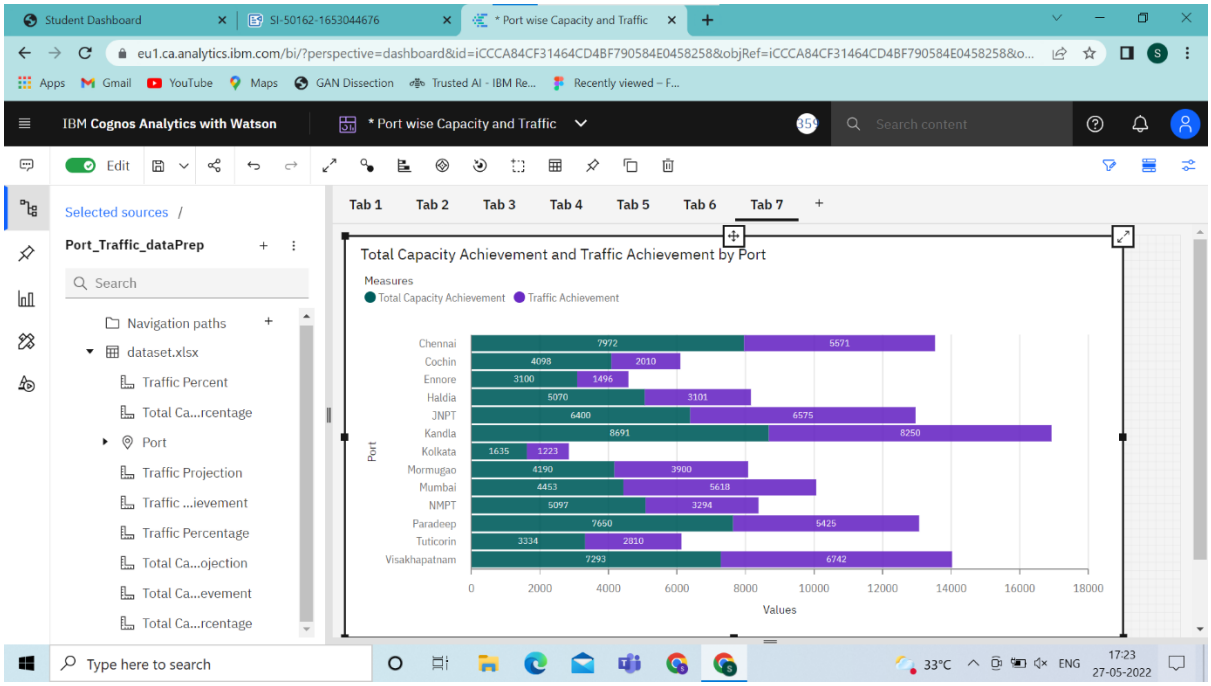
Port-Wise Traffic Projects Vs Total Projected By Area Chart

Link to dashboard:https://eu1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FPort%2Bwise%2BCapacity%2Band%2BTraffic&action=view&mode=dashboard&subView=model00000181055126ba_00000000



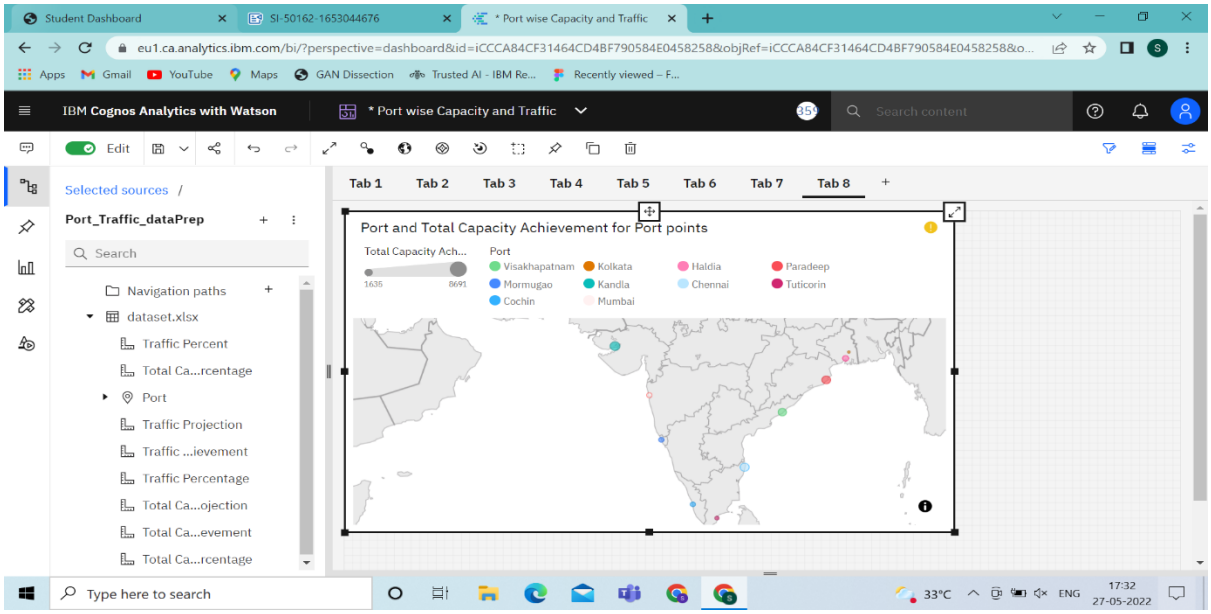
Port-Wise Total Capacity Achieve, Traffic Achieved Using Stacked Bar

Linked to the dashboard:https://eu1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FPort%2Bwise%2BCapacity%2Band%2BTraffic&action=view&mode=dashboard&subView=model000001810559c660_00000000

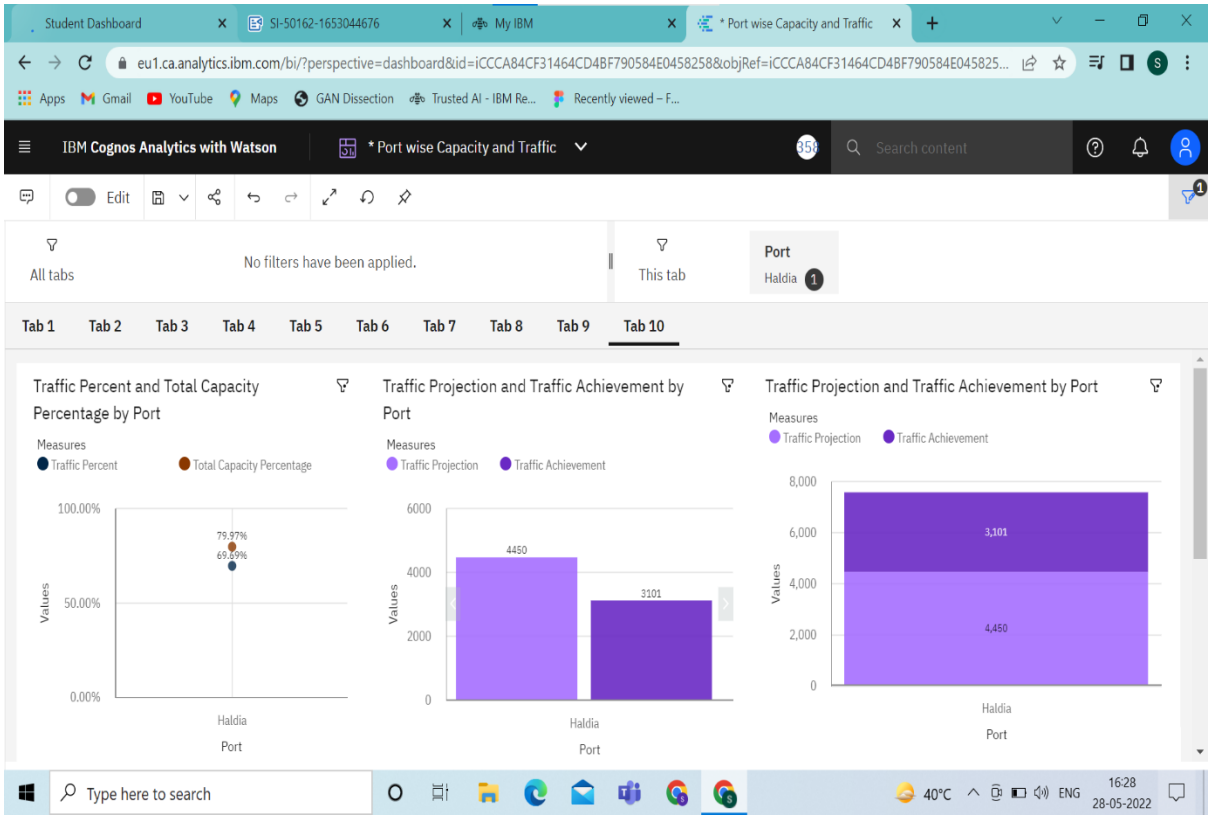


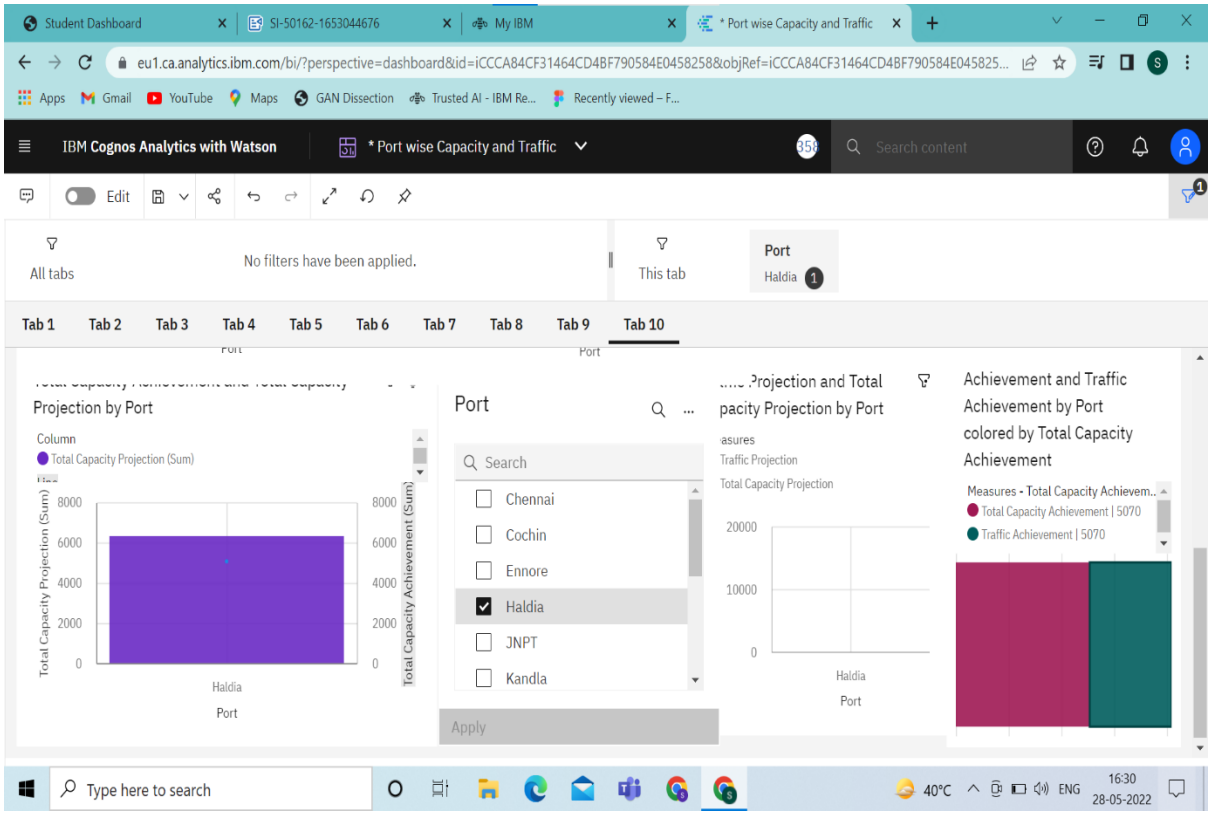
Port-Wise Total Capacity Achieved Using Map

Link to the Dashboard:https://eu1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FPort%2Bwise%2BCapacity%2Band%2BTraffic&action=view&mode=dashboard&subView=model00000181055fabeb_00000000



Filters: by port

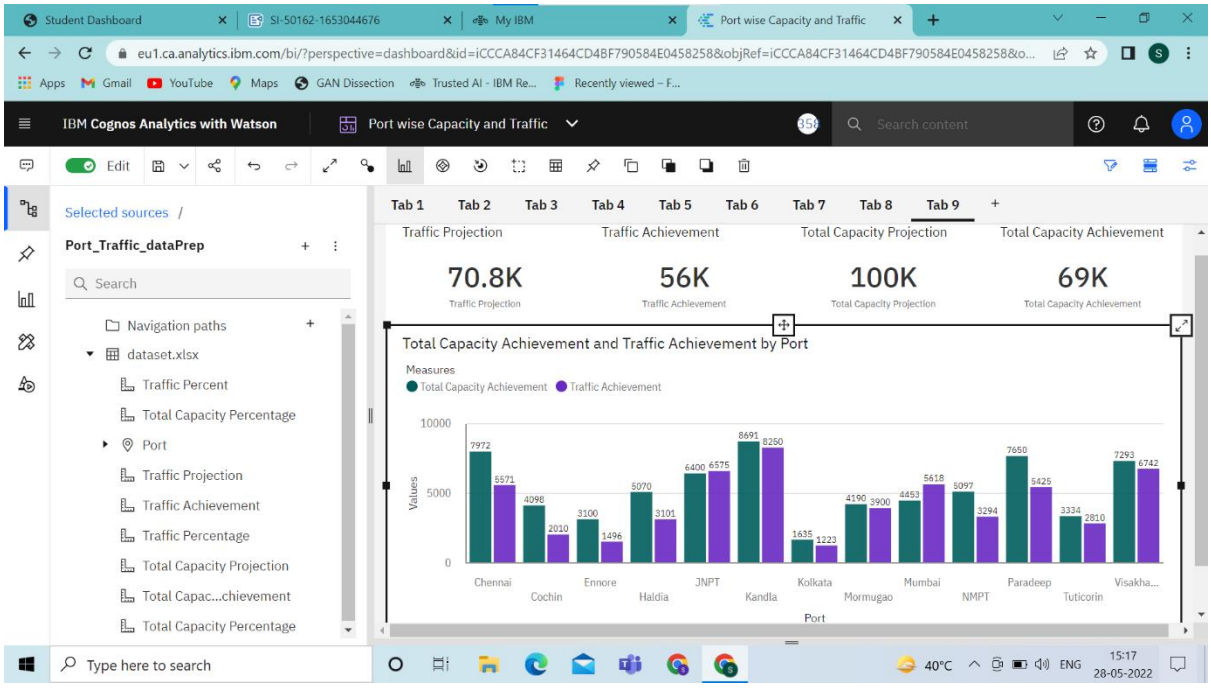




Summary Cards And Visual Using Total Capacity Vs Actual Capacity Column Chart

Dashboard link:

https://eu1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FPort%2Bwise%2BCapacity%2Band%2BTraffic&action=view&mode=dashboard&subView=model000001810a0280d1_00000000



Advantages of creating a dashboard:

Total visibility of the dataset

Can perform comparison of a single field with various different fields in a single screen

Makes conclusion of the dataset easier to read

Increased productivity

Usefulness of Dashboard:

With multiple graphs in one screen it became easier for us to compare and conclude

Conclusion:

Total Capacity and traffic achievement, projection is the highest for the port Kandla so overall traffic percentage and capacity percentage also becomes the highest for kandla port only in my dataset

Dashboard creation is an excellent method for data presentation for a laymen to understand and predict future pattern .IBM cognos is relatively easier and more classified method of data analysis