VYASA ARTS & SCIENCE WOMEN'S COLLEGE

SUBRAMANIAPURAM

DEPARTMENT OF MATHEMATICS

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A project documentation on the topic- Global Air Transportation with Network Tableau

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GLOBAL AIR TRANSPORTATION WITH NETWORK TABLEAU

1. INTRODUCTION:

1.1 OVERVIEW:

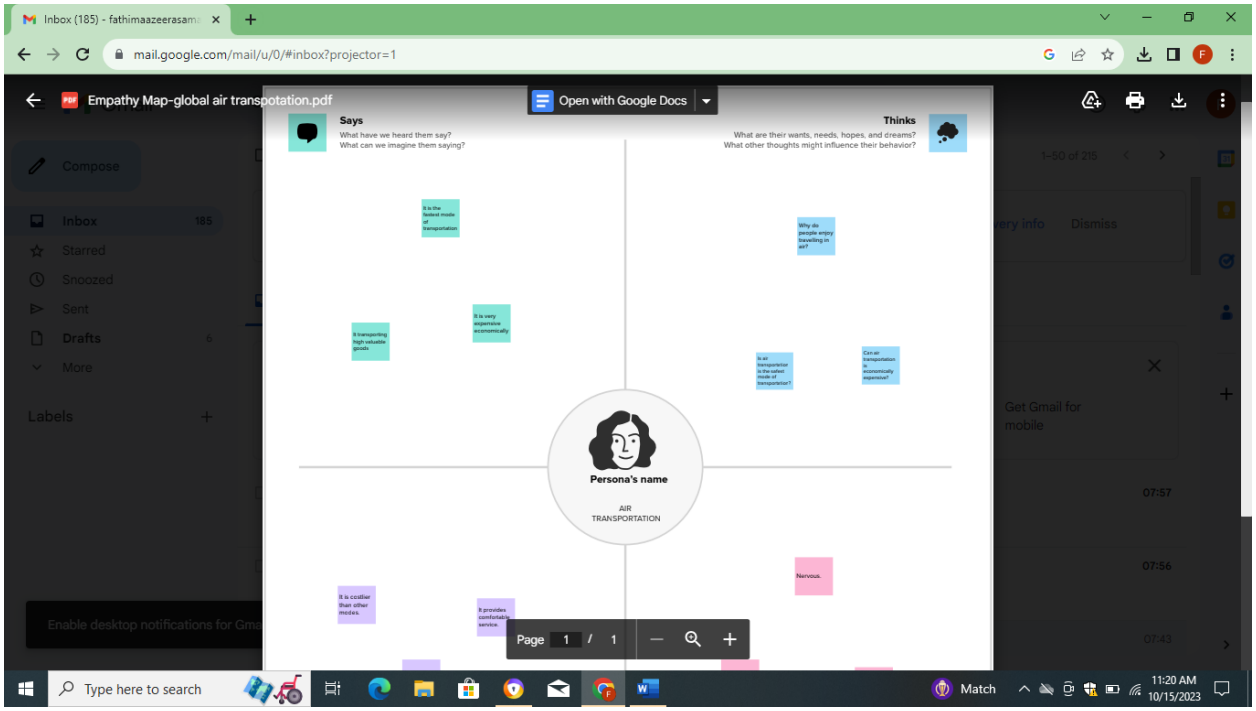
This Global Air Transportation Network is a comprehensive collection of information on airports, airlines and their routes. It contains information such as names, cities, countries, codes (IATA and ICAO) longitudes, latitudes and altitudes of airports across the world with detailed time zone and daylight saving time data. Additionally, this includes information about airlines including their ID's, name, IATA and ICAO codes, callsigns country of origin and active or inactive status Similarly, it also covers route details such as airline sources to destination airports along with essential details like code share stakeholder if any stops required during this journey along with the type of aircraft being used for that particular journey.

1.2 PURPOSE:

It provide a clear vision about global air transportation network tableau. This dataset has been compiled through meticulous labor by researchers all over the world to give you a comprehensive detail into air transportation networks from around the globe.

2. PROBLEM DEFINITION AND DESIGN THINKING:

2.1 EMPATHY MAP

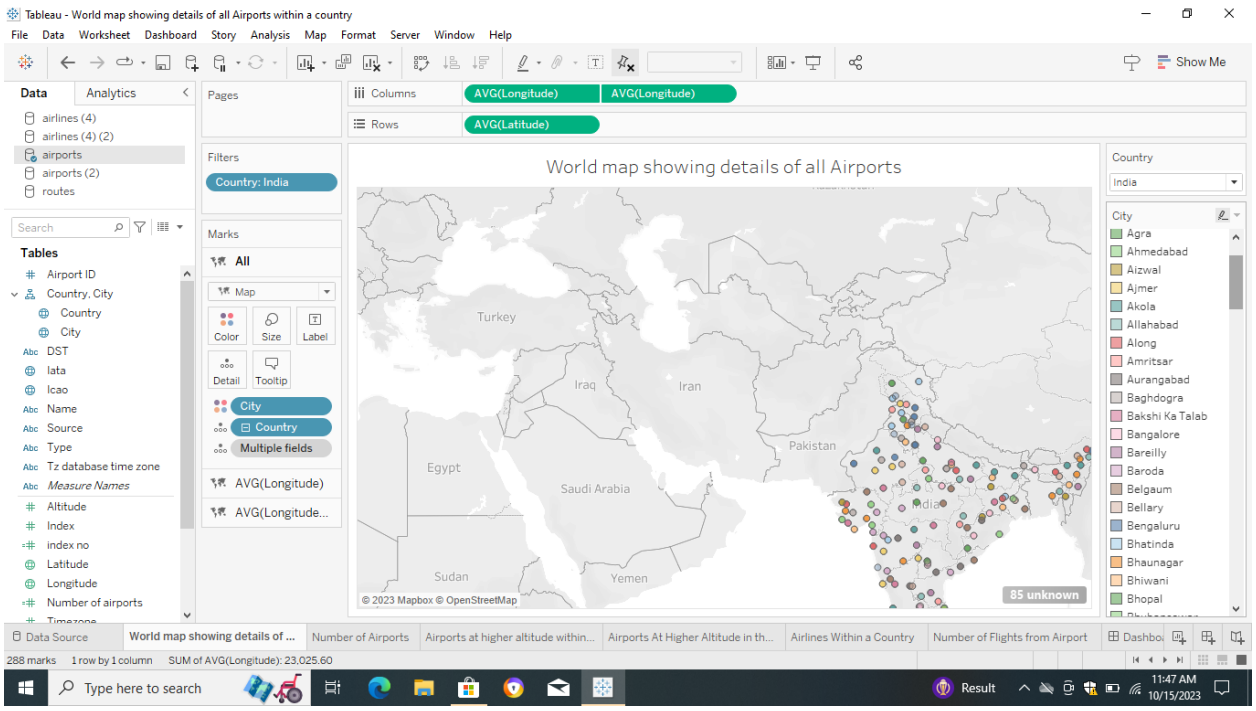


2.2 IDEATION AND BRAINSTORMING

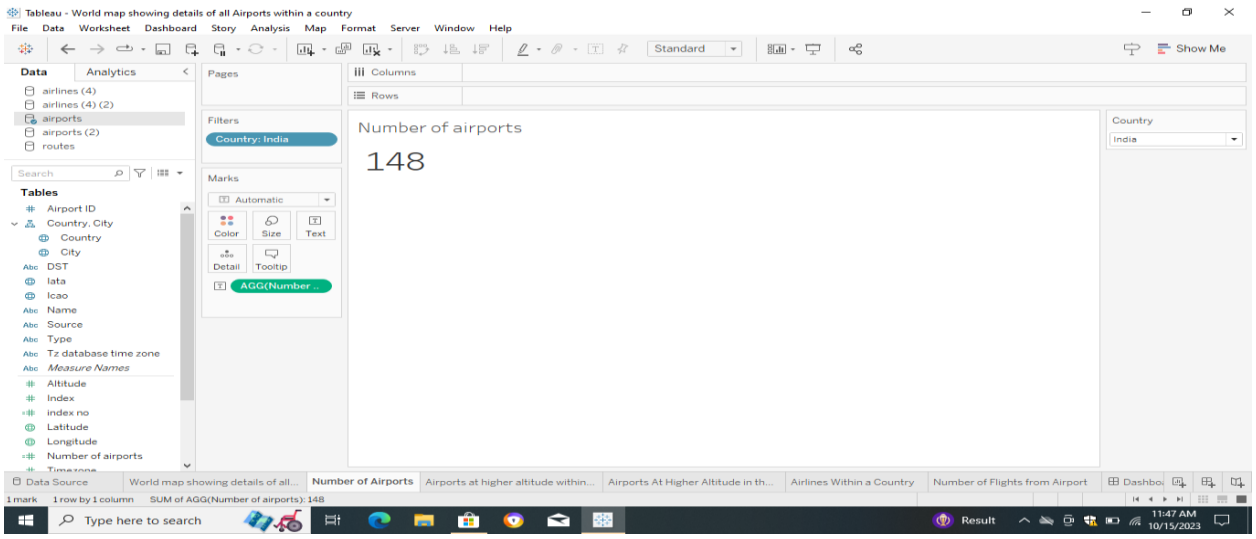
3. RESULTS:

3.1 CHARTS

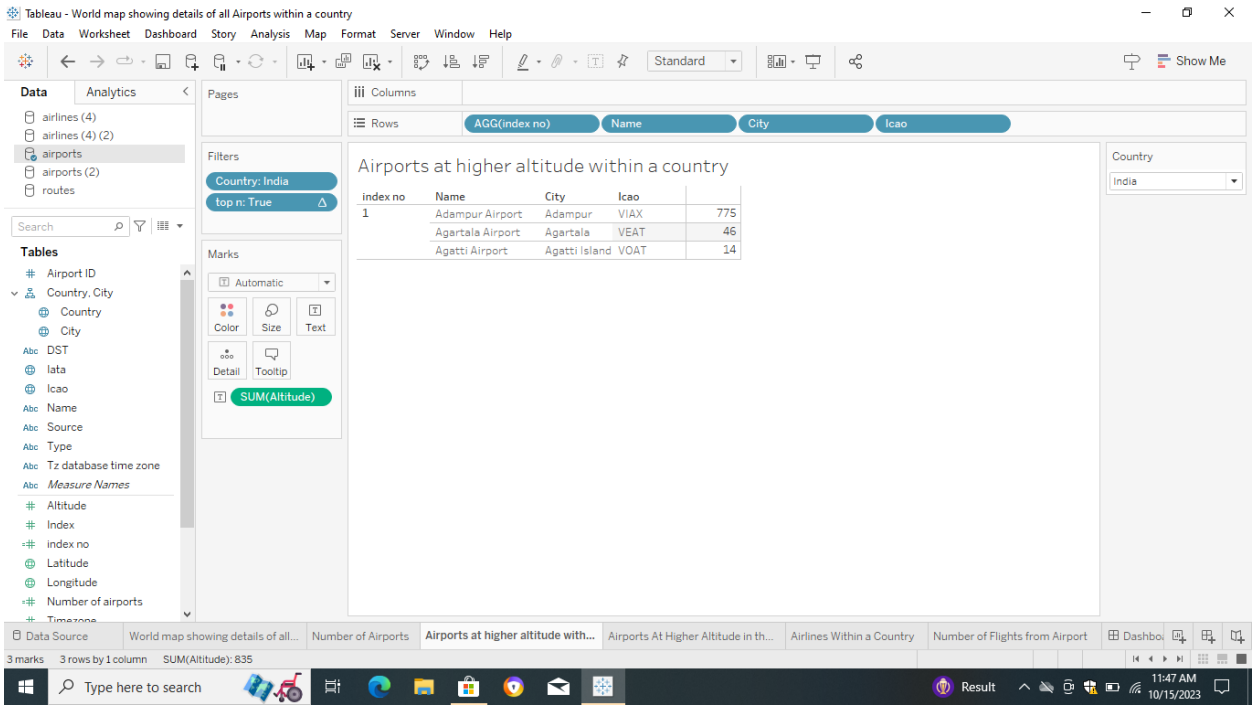
a) World Map showing details of All Airports Within a Country



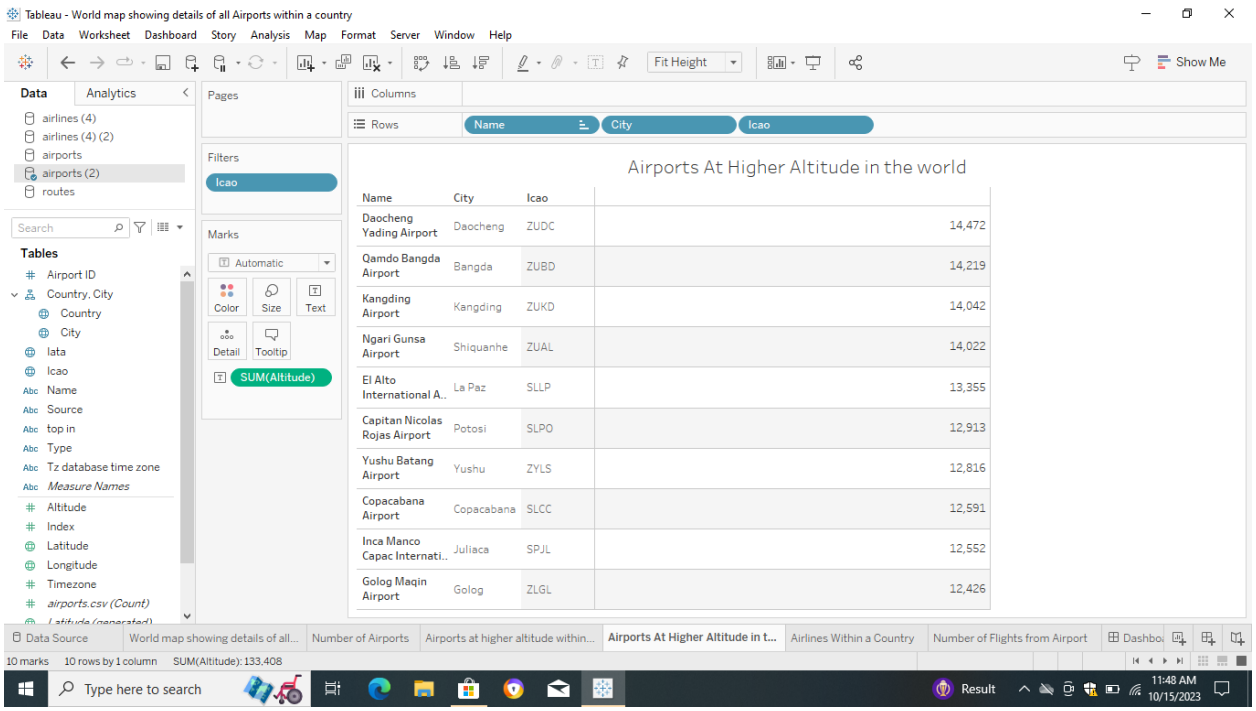
b) Number of Airports Within a Country



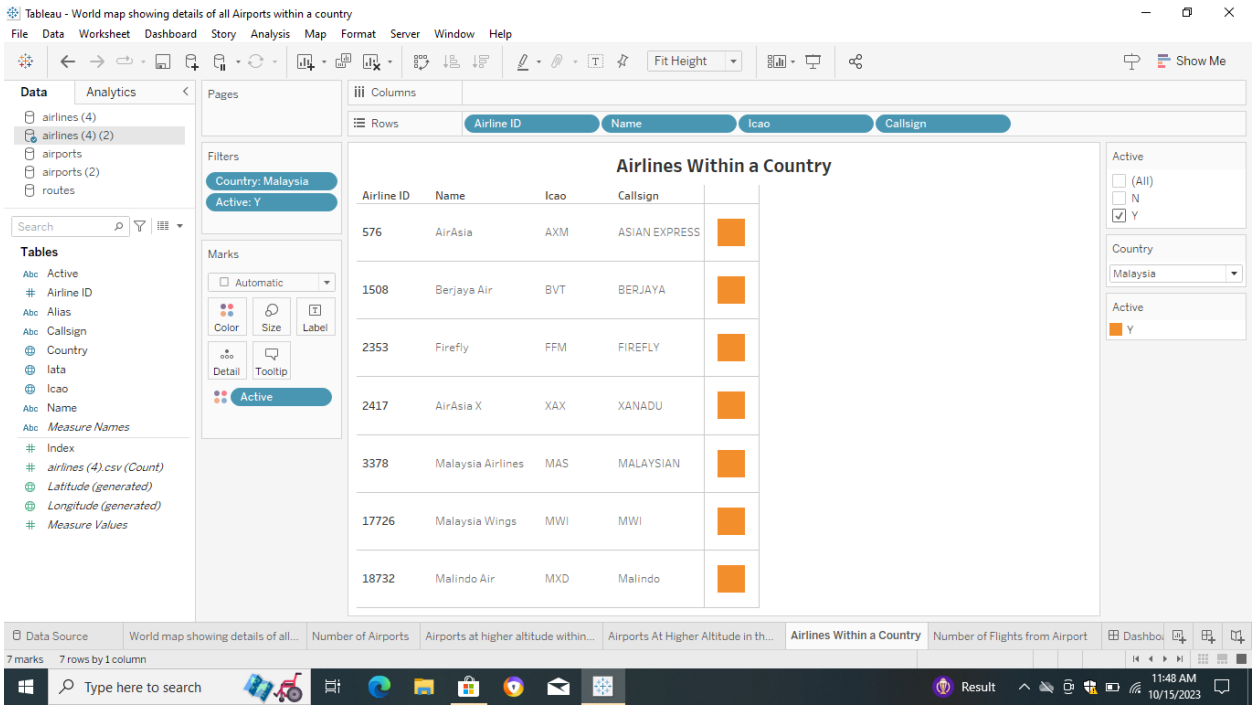
c) Airports At Higher Altitude within a country



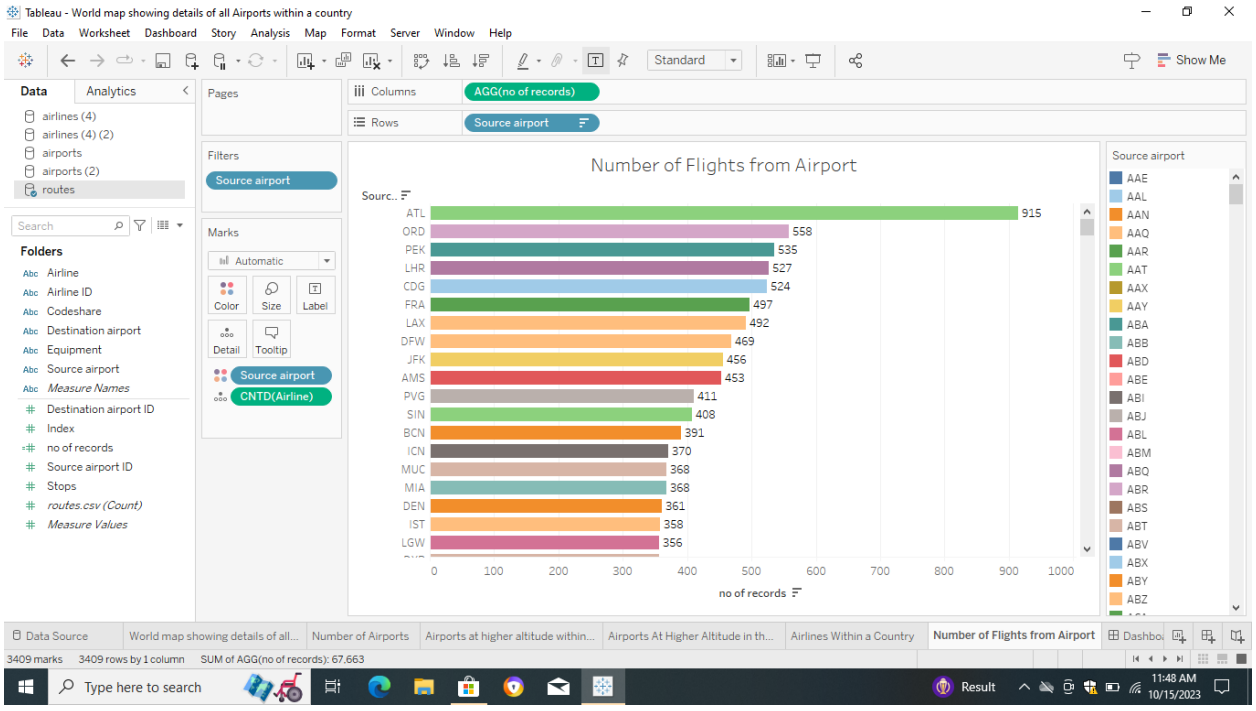
d) Airports At Higher Altitude in the world



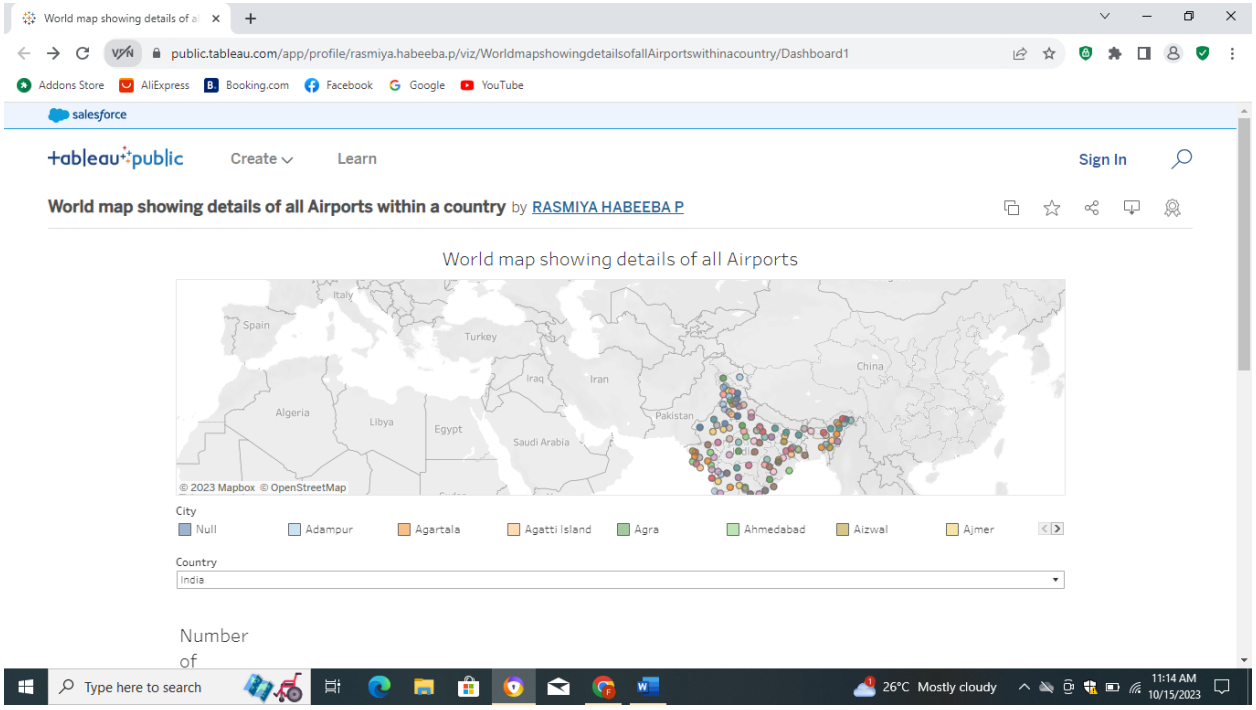
e) Airlines Within a Country

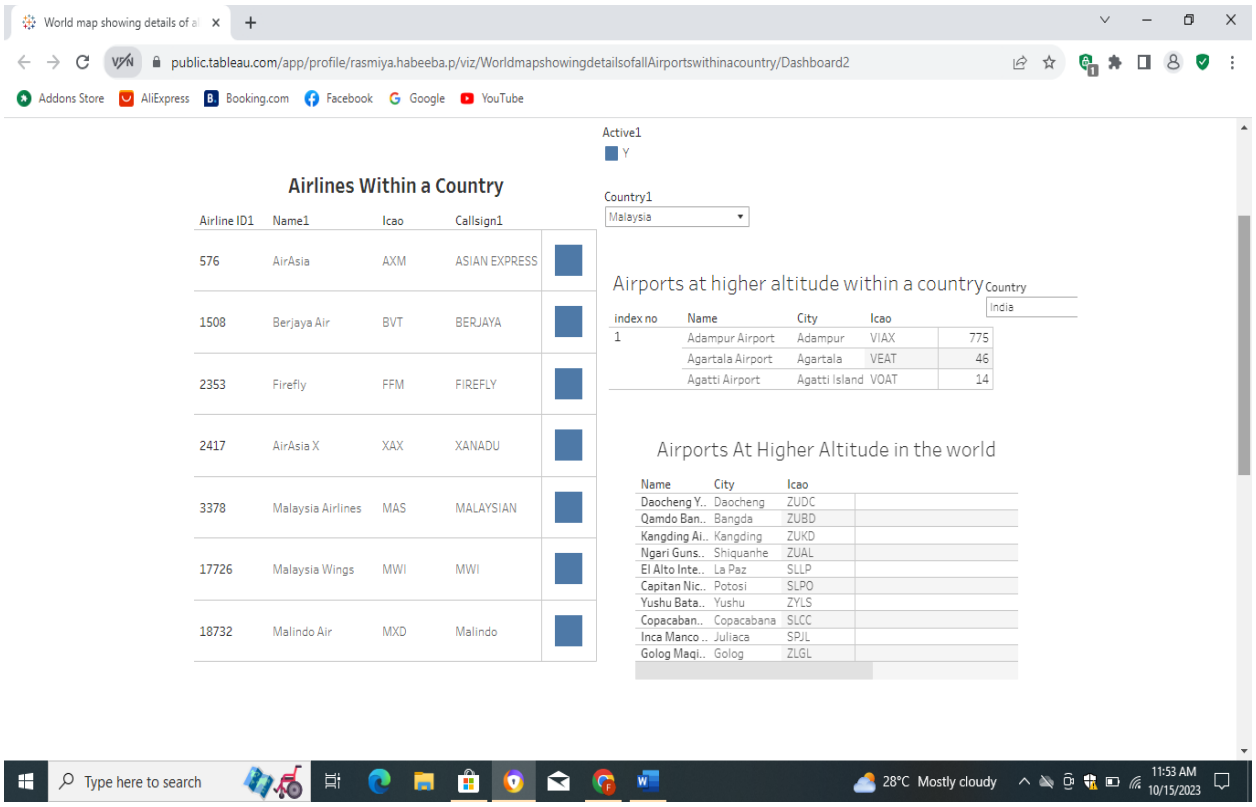


f) Number of Flights from Airport

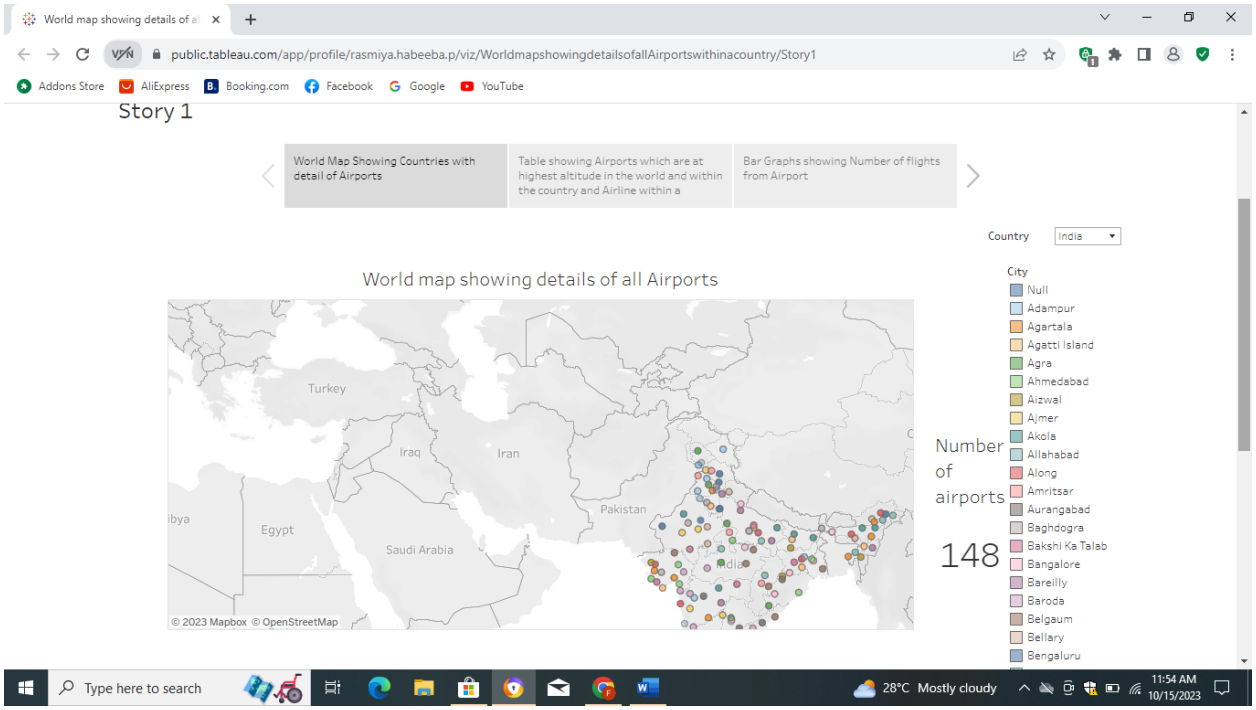


3.2 DASHBOARDS





3.3 STORY



4. ADVANTAGES AND DISADVANTAGES:

4.1 ADVANTAGES:

- It offers a consistent, comfortable, reliable and timely source.
- It is the quicker mode of transportation and therefore the most effective mode of transport when time is critical.
- It follows the shortest and direct route as seas, mountains do not come in the way of air transport.
- Air transport is regarded as best mode of transport for transporting service**.**

4.2 DISADVANTAGES:

- Airport safety restrictions on cargo are strictly forced.

- Air travel is the riskiest mode of transport ,since there can be considerable loves to good ,customer, and crews as a result of a minor crash
- Almost two million passengers fly each year maintaining the air transportation system so close to the brink of failure.
- Air travel is unsafe and unbelievable because it is heavily influenced by weather conditions**.**

5. APPLICATIONS:

- Most companies use air transport to market goods and products internationally or to develop samples and documents related to foreign trade operations.
- Air transport network models are also the tool to investigate system robustness.
- Facilitating quick and efficient travel to various destinations across the country.
- Almost all industrial sectors and distribution

6. CONCLUSION:

In this project global air transportation and network tableau is analyzed with the help of the tableau. For this data are calculated from various sources. At first, we define the problem in the form of empathy map and brainstorming. Then the collected data set are connected to the tableau and we created various charts, map charts. Finally, we create dashboard and story using three charts. Also from these charts we analyzed the estimation of business expenses in various sectors.

7. FUTURE SCOPE:

- Demand for air transport will increase by an average of 4.3%per annum over the next 20 years.
- The air transport industry will than contribute 15.5 million in direct jobs and $1.5 trillion of GDP of the world economy.
- It is planned to have 220 operating airports by 2025.