

Unlocking Insights into the Global Air Transportation Network

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Collage Name: Bharathi Women's Collage

Department: Physics

Year: 3rd Year

Introduction

Global Air Transportation is like a giant network of airlines connecting cities worldwide. It allows people to travel to far-off places, experiences different cultures, and explore new destinations. It also plays a crucial role in transporting goods and facilitating international trade. It's

amazing how planes can take us from one side of the world to the other in just a matter of hours!

Global Air Travel offers a multitude of benefits! It allows us to easily explore new places, experience diverse cultures, and connect with people from around the world. It also enables efficient transportation of goods, boosts tourism, and fosters international trade. Plus, It's a thrilling and convenient way to satisfy our wanderlust!

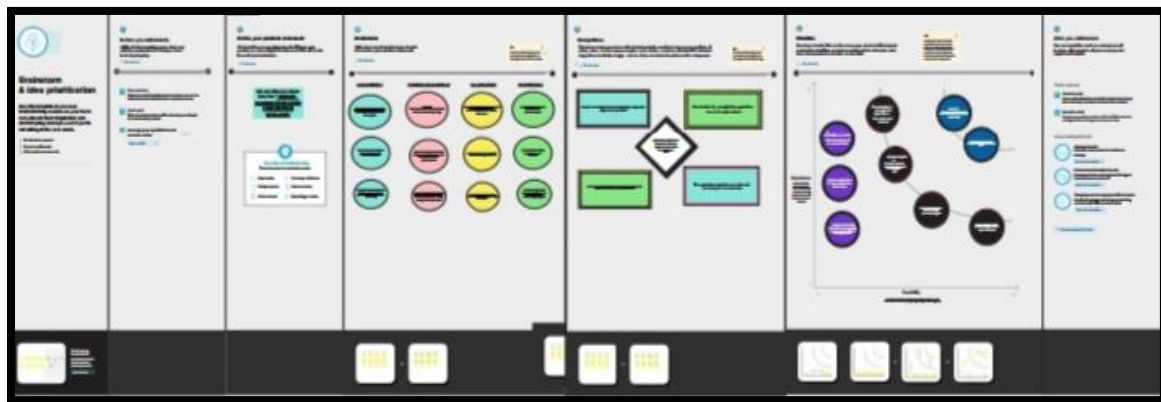
There are so many amazing global air travel destinations! Some popular ones include Paris, with its romantic atmosphere and iconic landmarks like the Eiffel Tower, Bali, known for its stunning beaches and vibrant culture, and New York City, a bustling metropolis with endless attractions and s vibrant atmosphere. These are just a few examples, but there are countless incredible places to explore around the world!

Problem Understanding

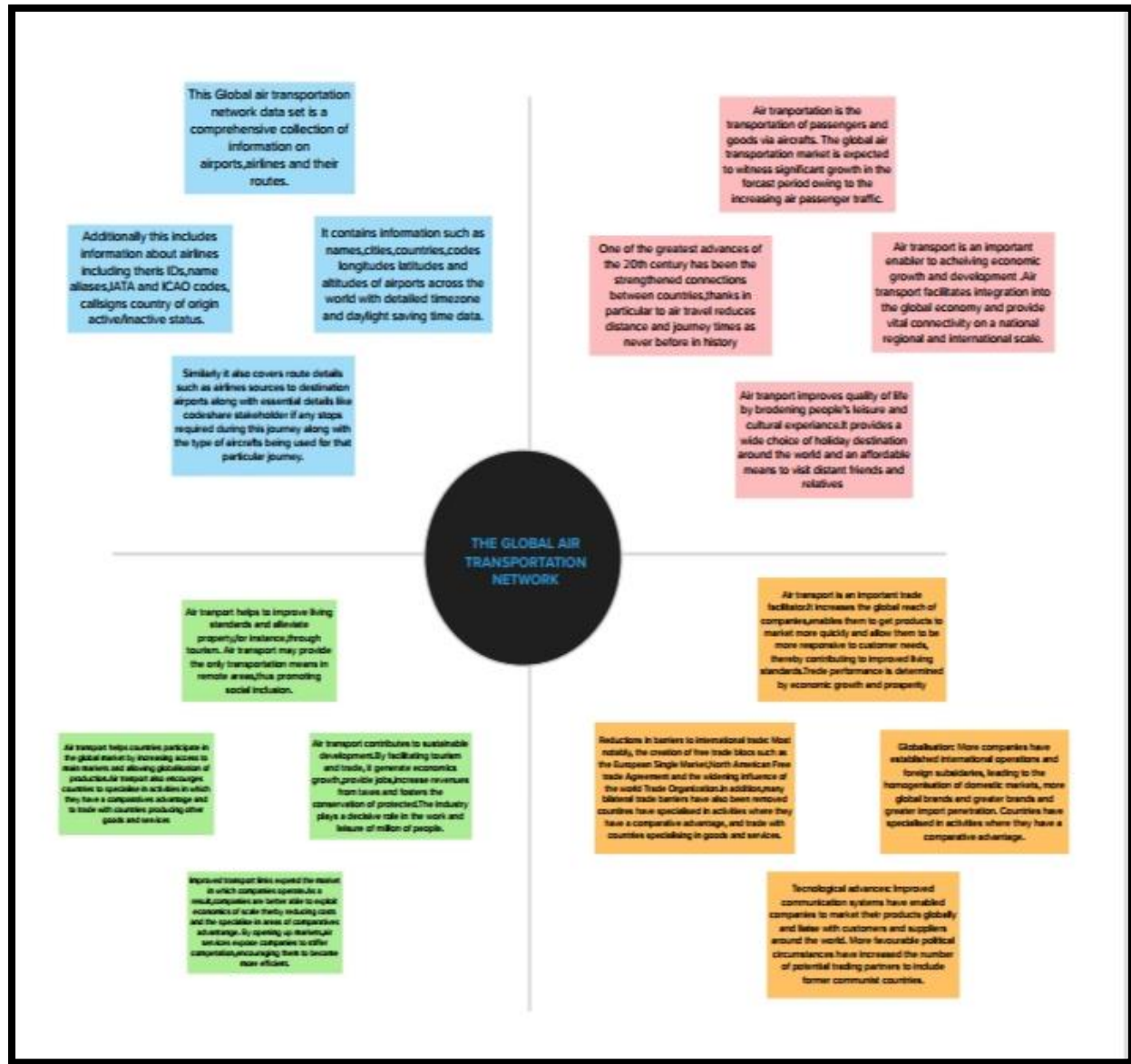
Empathy And Brainstorm Map

We used Empathy and Brainstorm Map and specific the Unlocking Insights into the Global Air Transportation Network.

BRAINSTORM



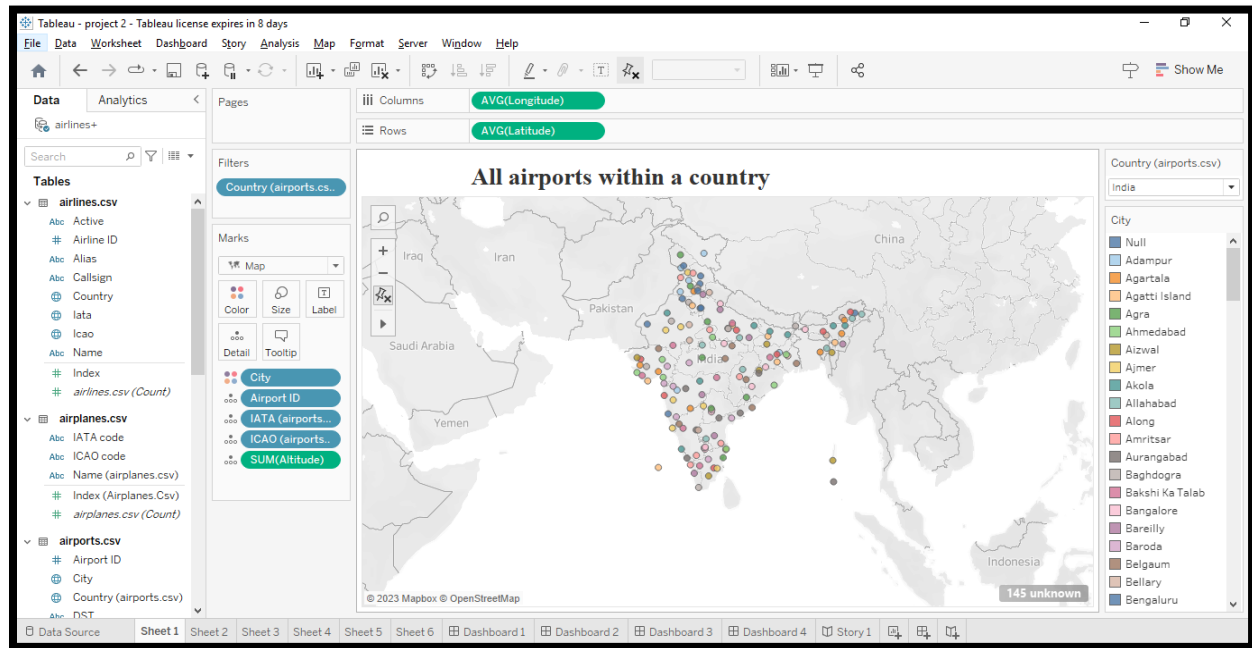
EMPATHY MAP



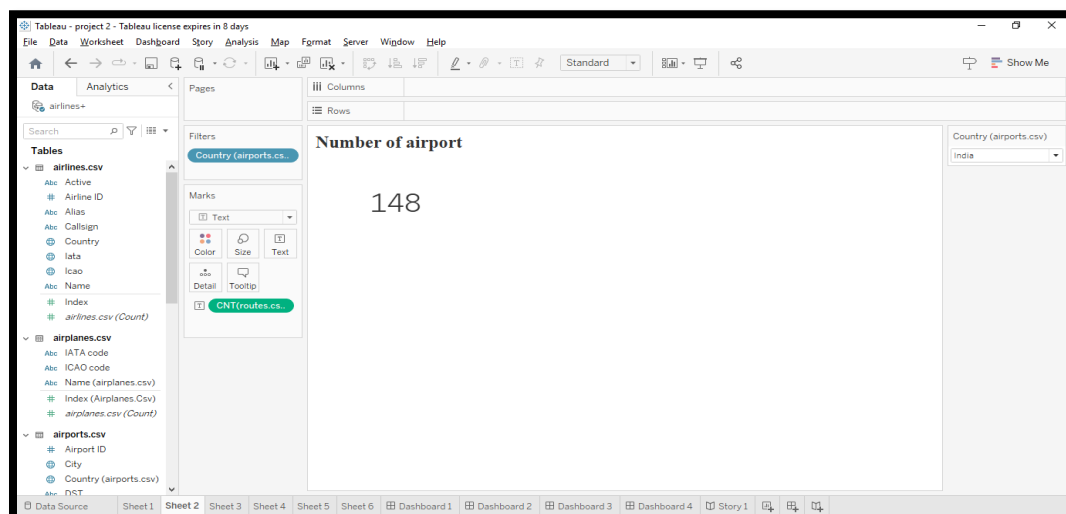
Data Visualization:

We used Differentiate the global air transportation network.

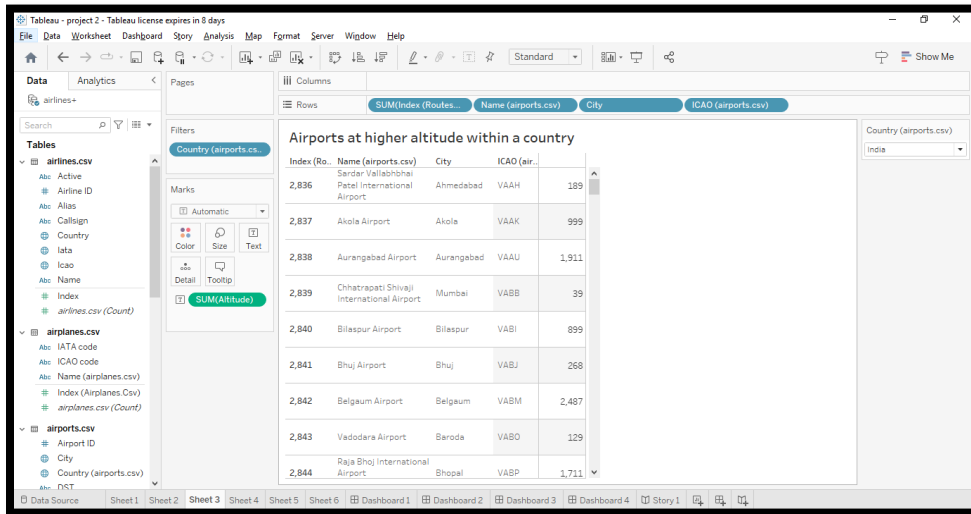
All Airports within a country



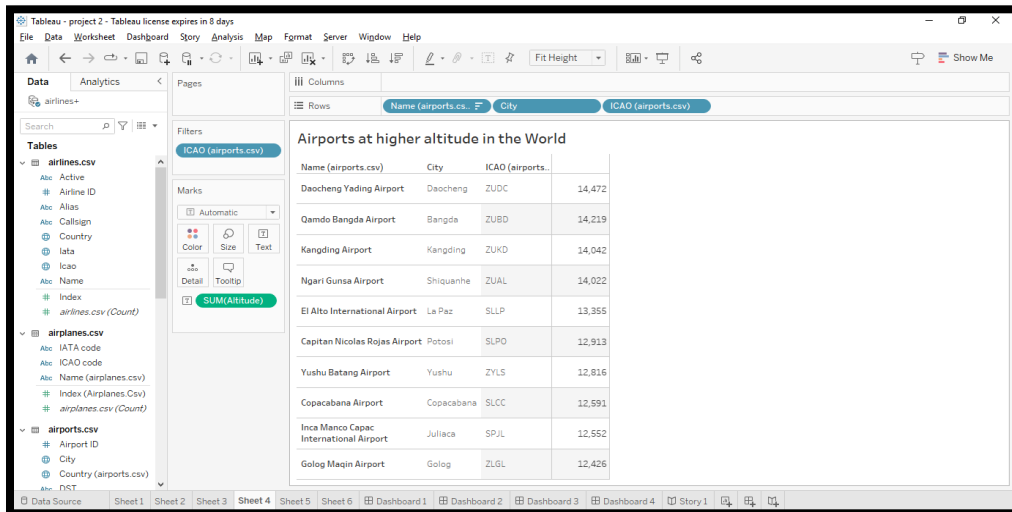
Number of Airports



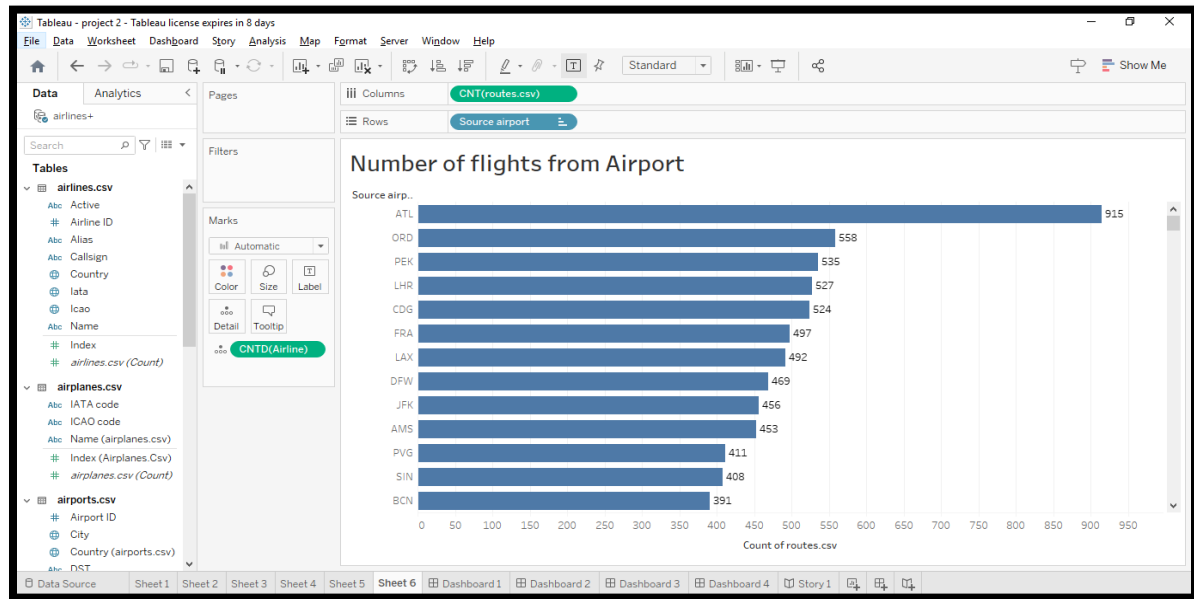
Airports at higher altitude within a country



Airports at higher altitude within a country

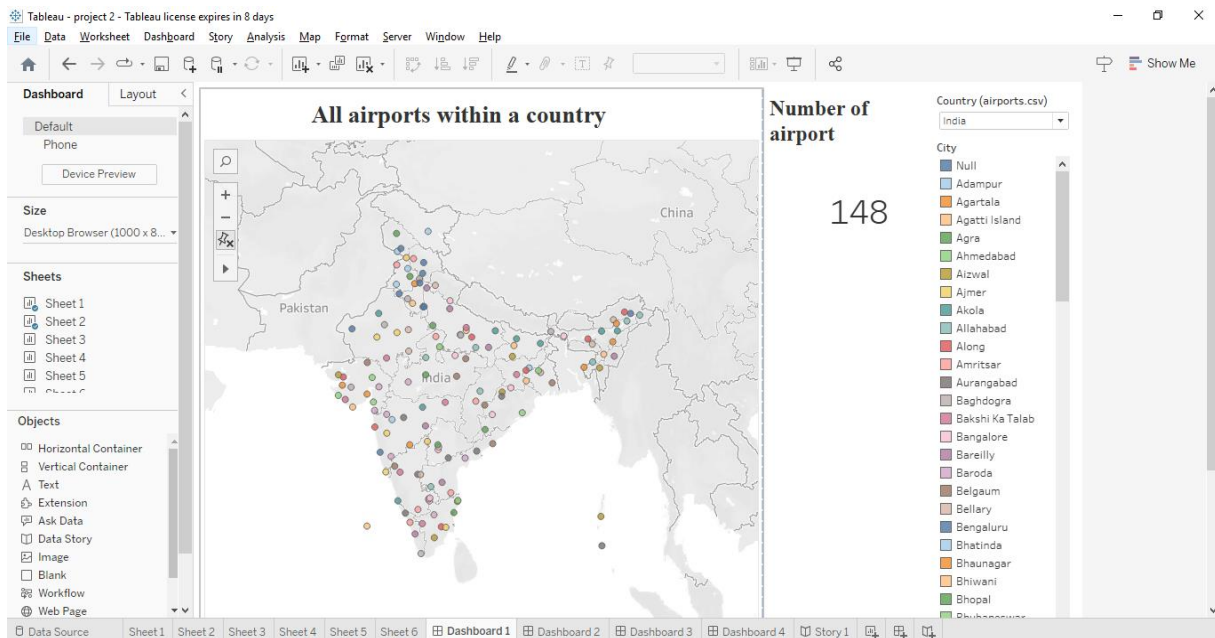


Number of Flights from Airport



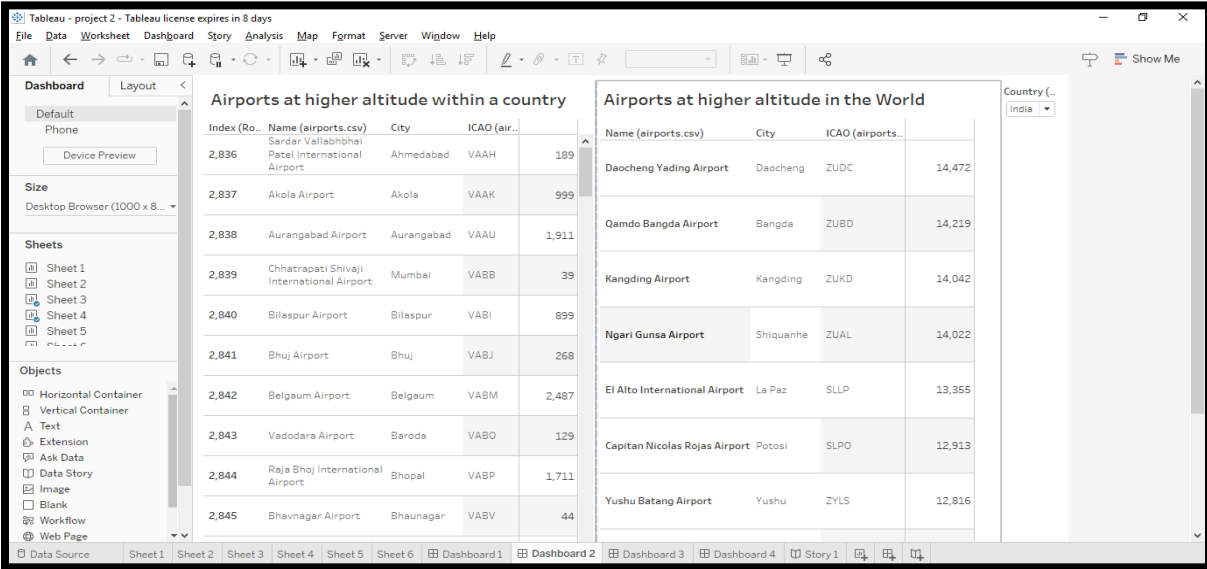
Dashboard-1

Dashboard refers the All Airports within a country



Dashboard –2

Dashboard refers to the Airports at higher altitude within a country and the world.



Airports at higher altitude within a country

Index (Ro..	Name (airports.csv)	City	ICAO (air..	
2,836	Sardar Vallabhbhai Patel International Airport	Ahmedabad	VAAH	189
2,837	Akola Airport	Akola	VAAK	999
2,838	Aurangabad Airport	Aurangabad	VAAU	1,911
2,839	Chhatrapati Shivaji International Airport	Mumbai	VABB	39
2,840	Bilaspur Airport	Bilaspur	VABI	899
2,841	Bhuj Airport	Bhuj	VABJ	268
2,842	Belgaum Airport	Belgaum	VABM	2,487
2,843	Vadodra Airport	Baroda	VABO	129
2,844	Raja Bhoj International Airport	Bhopal	VABP	1,711
2,845	Bhavnagar Airport	Bhavnagar	VABV	44

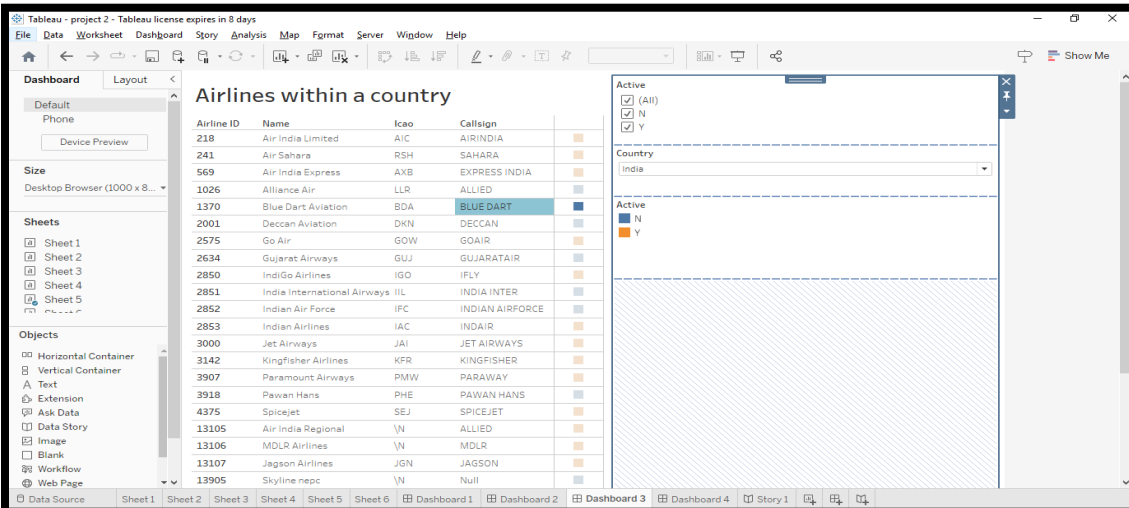
Airports at higher altitude in the World

Name (airports.csv)	City	ICAO (airports..	
Daocheng Yading Airport	Daocheng	ZUDC	14,472
Qamdo Bangda Airport	Bangda	ZUBD	14,219
Kangding Airport	Kangding	ZUKD	14,042
Ngari Gunsa Airport	Shiquanhe	ZUAL	14,022
El Alto International Airport	La Paz	SLLP	13,355
Capitan Nicolas Rojas Airport	Potosi	SLPO	12,913
Yushu Batang Airport	Yushu	ZYLS	12,816

Country (..
India

Dashboard-3

Dashboard refers a Airlines Within a Country



Airlines within a country

Airline ID	Name	Icao	Callsign
218	Air India Limited	AIC	AIRINDIA
241	Air Sahara	RSH	SAHARA
569	Air India Express	AXB	EXPRESS INDIA
1026	Alliance Air	LLR	ALLIED
1370	Blue Dart Aviation	BDA	BLUE DART
2001	Deccan Aviation	DKN	DECCAN
2575	Go Air	GOW	GOAIR
2634	Gujarat Airways	GUJ	GUJARATAIR
2850	IndiGo Airlines	IGO	IFLY
2851	India International Airways	IIL	INDIA INTER
2852	Indian Air Force	IFC	INDIAN AIRFORCE
2853	Indian Airlines	IAC	INDAIR
3000	Jet Airways	JAI	JET AIRWAYS
3142	Kingfisher Airlines	KFR	KINGFISHER
3907	Paramount Airways	PMW	PARAWAY
3918	Pawan Hans	PHE	PAWAN HANS
4375	Spicejet	SEJ	SPICEJET
13105	Air India Regional	VN	ALLIED
13106	MDLR Airlines	VN	MDLR
13107	Jagson Airlines	JGN	JAGSON
13905	Skyline nepc	VN	Null

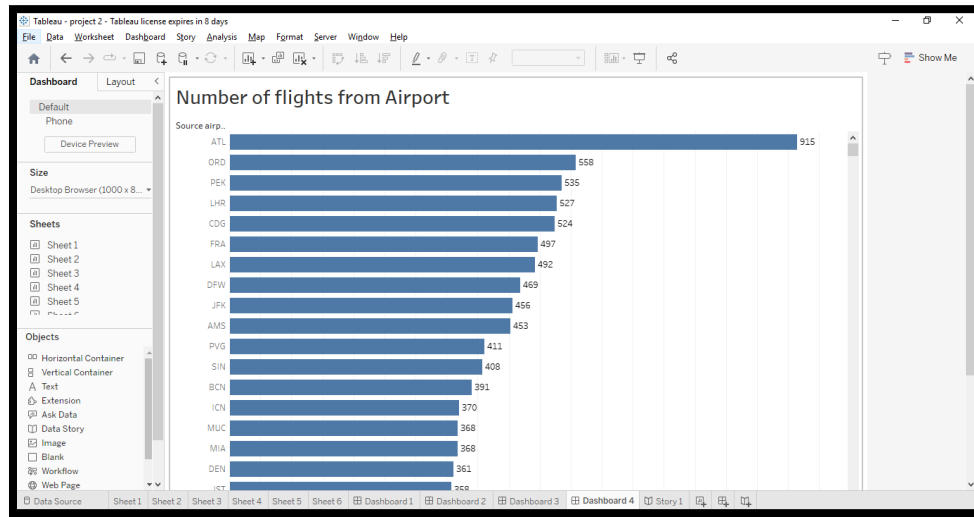
Active
☒ (All)
☒ N
☒ Y

Country
India

Active
☒ N
☒ Y

Dashboard-4

Number of flights from Airport



Story

It gives the main information about Global Air Transportation.

Global Air Transportation Network

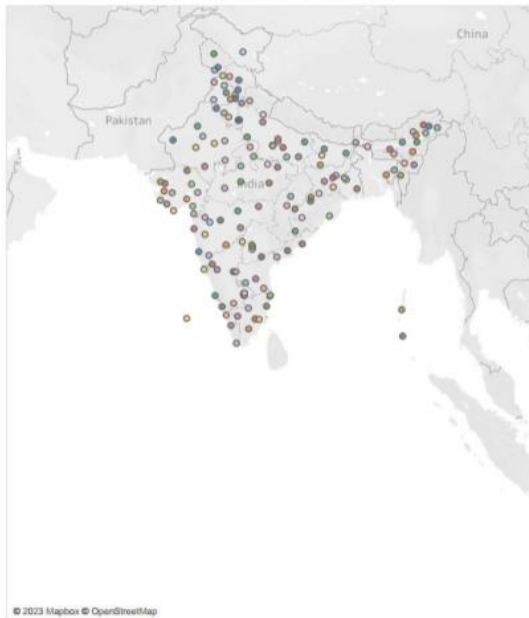
World Map Showing
Countries with details
of Airports.

Table showing airports
which are at highest
altitude in the world ...

Table showing list of
all airlines within the
country.

Bar graphs showing
countries with max No.
of Airports & No. of fl...

All airports within a country



Number of airport

148

Country (airports.csv)

India

City

Null

Adampur

Agartala

Agatti Island

Agra

Ahmedabad

Aizwal

Ajmer

Akola

Allahabad

Along

Amritsar

Aurangabad

Baghdogra

Bakshi Ka Talab

Bangalore

Bareilly

Baroda

Belgaum

Bellary

Bengaluru

Bhatinda

Bhavnagar

Bhivani

Bhopal

Bhubaneswar

Bhuj

Bidar

Bikaner

Bilaspur

Bokaro

Calicut

Carricobar

Country (airports.csv)

India

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2,845	Bhavnagar Airport	Bhavnagar	VABV	44
2,846	Daman Airport	Daman	VADN	33
2,847	Deesa Airport	Deesa	VADS	485
2,848	Guna Airport	Guna	VAGN	1,600
2,849	Dabolim Airport	Goa	VAGO	150

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Name (airports.csv)	City	ICAO (airports..)	
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Yushu Batang Airport	Yushu	ZYLS	12,816
Copacabana Airport	Copacabana	SLCC	12,591
Inca Manco Capac International Airport	Julica	SPJL	12,552
Golog Maqin Airport	Golog	ZLGL	12,426

Country (-
India

Global Air Transportation Network

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2634	Gujarat Airways	GUJ	GUJARATAIR	
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2852	Indian Air Force	IFC	INDIAN AIRFORCE	
2853	Indian Airlines	IAC	INDAIR	
3000	Jet Airways	JAI	JET AIRWAYS	
3142	Kingfisher Airlines	KFR	KINGFISHER	
3907	Paramount Airways	PMW	PARAWAY	
3918	Pawan Hans	PHE	PAWAN HANS	
4375	Spicejet	SEJ	SPICEJET	
13105	Air India Regional	IN	ALLIED	
13106	MDLR Airlines	MDLR	MDLR	
13107	Jagson Airlines	JGN	JAGSON	
13905	Skyline nepc	IN	Null	
16327	Indya Airline Group	IGL	Indya1	
16362	OCEAN AIR CARGO	IXO	Null	
16738	NEPC Airlines	IN	Null	
16901	12 North	N12	12N	
19451	Air Costa	IN	Null	
20264	Air Vistara	VTI	Null	
20286	Air Pegasus	PPL	Null	
21270	Air Carnival	IN	Null	

Active
☒ N
☒ Y

Country
India

Active
☒ N
☒ Y

Global Air Transportation Network

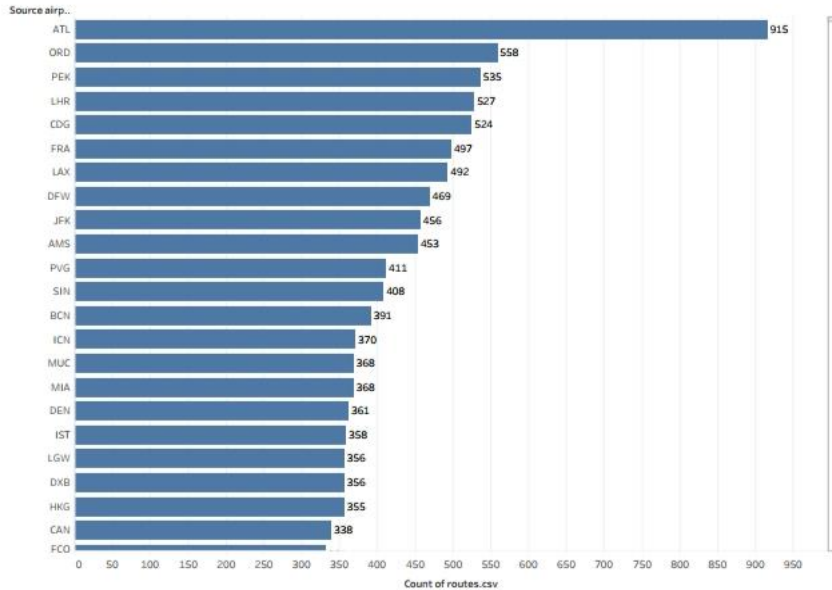
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Conclusion:

The Air transport industry is not only a vital engine of global socio-economic growth but is also of vital importance as a catalyst for economic development in most countries and for many regions within each country. Its importance arises to expedite the movement of goods. The development of more fuel efficient aircraft and engines must also be encouraged.