A Project Report

on

TnT – Trends in Trades

by

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Under the guidance of

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PIMPRI CHINCHWAD COLLEGE OF ENGINEERING

SECTOR26, NIGDI, PRADHIKARAN

SAVITRIBAI PHULE PUNE UNIVERSITY

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SEMESTER I

DEPARTMENT OF COMPUTER ENGINEERING,

PIMPRI CHINCHWAD COLLEGE OF ENGINEERING

SECTOR26, NIGDI, PRADHIKARAN

Date: 10/12/2020

CERTIFICATE

This is to certify that,

Anshu Srivastava(TECOB263.)
Gourangi Taware (TECOB267)

of class T.E Computer Engineering; have successfully completed their project work on "TnT – Trends in Trades'' at PIMPRI CHINCHWAD COLLEGE OF ENGINEERING in the partial fulfillment of the Graduate Degree course in T.E at the Department of **Computer Engineering**, in the academic Year 2017-2018 Semester – I as prescribed Savitribai Phule Pune University.

Prof. Ganesh Deshmukh
Guide

Acknowledgements

Presentation, inspiration and motivation have always played a key role in the success of any venture.

We express our sincere thanks to Prof. Ganesh Deshmukh, our guide through the making of this entire project.

We pay our deep sense of gratitude to Dr. K. Rajeswari, HOD, Computer Engineering, Pimpri Chinchwad College of Engineering, Pune to encourage us to the highest peak and to provide us with this opportunity. Also, a sincere thanks to Dr. G. V Parishwad, Principal, Pimpri Chinchwad College of Engineering, Pune.

We also feel a deep sense of gratitude to all our lab assistants and faculty who helped us in making this a success.

Last but not the least, we are immensely obliged to our friends for their elevating inspirations, elevating guidance and kind supervision along with our parents, who are an important inspiration to us.

Anshu Srivastava(TECOB263.)
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Abstract

India is one of the fastest developing nations of the world and trade between nations is the major component of any developing nation. This dataset includes the trade data of Indian commodities.

International trade gives many opportunities to traders for getting success. But, the road to international business success isn't that easy! Before doing business in the global market, one should have in-depth knowledge about the industry.

Not having the right knowledge about the import and export business can create expensive blunders for one's business.

A detailed study of the import and export trade in India is carried out as the import and export data helps determine the development as well as the decrement of not only Indian but also Global Import-export trade for specific products. By studying these data, the stakeholders have the choice of whether to invest or not in a specific trade of import and export.

Chapter 1

Introduction

1.1 Motivation

Foreign **trade** plays a vital part in the economy of each country. Foreign **trade** helps a country to utilize its natural resources and to export its surplus production, it contributes hugely to the GDP of a country. There is growth in information and communication related services like computer software, hardware, internet, e - commerce and telecommunication sector.

1.2 Problem Statement

The import and export industry isn't like any other industry. It comes under the international trade sector.

International trade gives many opportunities to traders for getting success. But, the road to international business success isn't that easy! Before doing business in the global market, one should have in-depth knowledge about the industry.

Not having the right knowledge about the import and export business can create expensive blunders for one's business.

1.3 Project Objectives

India is one of the fastest developing nations of the world and trade between nations is the major component of any developing nation. This dataset includes the trade data of Indian commodities.

A detailed study of the import and export trade in India is carried out as the import and export data helps determine the development as well as the decrement of not only Indian but also Global Import-export trade for specific products. By studying these data, the stakeholders have the choice of whether to invest or not in a specific trade of import and export.

The main objective of the present study is to examine the trends in India's exports and import in terms of value and to examine the structural changes in composition of India's exports and import.

Chapter 2

Literature Survey/ Requirement Analysis

2.1 Introduction

India exports approximately 7500 commodities to about 190 countries, and imports around 6000 commodities from 140 countries. India exported US$318.2 billion and imported $462.9 billion worth of commodities in 2014.

The Government of India's Economic Survey 2017–18 noted that five states — Maharashtra, Gujarat, Karnataka, Tamil Nadu and Telangana — accounted for 70% of India's total exports. It was the first time that the survey included international export data for states. The survey found a high correlation between a state's Gross State Domestic Product (GSDP) per capita and its share of total exports. With a high GSDP per capita but low export share, Kerala was the only major outlier because the state's GSDP per capita was heavily influenced by remittances.

The survey also found that the largest firms in India contributed to a smaller percentage of exports when compared to countries like Brazil, Germany, Mexico, and the United States. The top 1% of India's companies accounted for 38% of total exports.

The provisional data for March exports, released by the Ministry of Commerce at the end of April, reveals a grim situation. As per the data, India’s exports during March 2020 accounted for a little over $21.4 billion, despite a promising performance in just the previous month. This fall of approximately 35% year-on-year, as compared to March 2019 ($32.72 billion), is touching a multi-year low, and the figures are bound to fall further. A key thing to note is that exports have fallen across almost all of the commodity groups. Some commodities have registered a decline by over 30-40%, particularly engineering goods, textiles, meat, cereals, plastics and chemicals, which have been the major growth drivers of exports in recent years. As an immediate aftermath of the spread of the COVID-19 pandemic to multiple countries, global demand has fallen significantly and many orders have been cancelled. Further, the disruption of supply chains due to the on-going lockdown has aggravated the poor performance of Indian exports -- and the situation is likely to worsen in the coming months, before recovery starts. India's electrical machinery and equipment has 40 per cent dependence on imports from China. However this number has reduced from 59.5 per cent in FY18 to 40 per cent in FY19. Although India has increased production of low-end electronic components. Import dependency on China is its major limitation. The automobile sector, which accounts for 7.5 per cent of India's GDP and a massive 49 per cent of the manufacturing GDP, is already facing slowdown

2.2 Existing methodologies/System

The major trade policy changes in the post-1991 period included simplification of procedures, removal of quantitative restrictions and substantial reduction in tariff rates. A significant development in the current account of balance of payments in the 1990s was the remarkable growth in the exports of invisibles to the rest of world.

This was made possible by unfrequented growth in information and communication related services like computer software, hardware, internet, e - commerce and telecommunication sector. The economic reforms process introduced since 1991 with focus on liberalization, openness, transparency and globalization has enabled increased integration of the Indian economy with the rest of world.

The growth rate of India's trade is increasingly dependent on exogenous factors such as world trade growth (especially those of the trading partners), international price changes and development in the competitor countries. Cross currency exchange rates as well as dollar rupee exchange rate movements also get reflected in the performance of India's trade.

2.3 Proposed methodologies/System

Trade increases competition and lowers world prices, which provides benefits to consumers by raising the purchasing power of their own income, and leads a rise in consumer surplus. **Trade** also breaks down domestic monopolies, which face competition from more efficient foreign firms.

In today's global economic system, countries exchange not only final products, but also intermediate inputs. This creates an intricate network of economic interactions that cover the whole world.

Exploratory Data Analysis refers to the critical process of performing initial investigations on data so as to discover patterns, to spot anomalies, to test hypothesis and to check assumptions with the help of summary statistics and graphical representations. In this section we are going to descriptive analysis and graphical representations.

2.3 Project Plan

The main objective of the present study is to examine the trends in India's exports and import in terms of value and to examine the structural changes in composition of India's exports and import.

Following are the steps Followed to get the visualization of the data:

- Importing Packages and Collecting Data
- Variable Description, Identification, and Correction
- Data preprocessing
- Exploratory Data Analysis

Exploratory Data Analysis refers to the critical process of performing initial investigations on data so as to discover patterns, to spot anomalies, to test hypothesis and to check assumptions with the help of summary statistics and graphical representations. In this section we are going to descriptive analysis and graphical representations.

The data is classified on the basis of following categories:

- Year Wise Analysis
- Commodity Wise Analysis
- Country Wise Analysis

Chapter 3

Project Design

3.1 Hardware and Software Requirements in detail

3.1.1 USER INTERFACES

- Front-end software: HTML, CSS , JavaScript
- Back-end software: MySQL

3.1.2 HARDWARE INTERFACES

- Windows.
- A browser which supports CSS, HTML & JavaScript.

3.1.3 SOFTWARE INTERFACES

- Python 3.x
- Libraries: pandas, Numpy, Matplotlib, seaborn
- Jupyter Notebook

3.1.4 COMMUNICATION INTERFACES

This project supports all types of web browsers.

3.2 NONFUNCTIONAL REQUIREMENTS

3.2.1 PERFORMANCE REQUIREMENTS:

The steps involved to perform the implementation of airline database are as listed below.

NORMALIZATION:

The basic objective of normalization is to reduce redundancy which means that information is to be stored only once. Storing information several times leads to wastage of storage space and increase in the total size of the data stored.
If a database is not properly designed it can give rise to modification anomalies. Modification anomalies arise when data is added to, changed or deleted from a database table. Similarly, in traditional databases as well as improperly designed relational databases, data redundancy can be a problem. These can be eliminated by normalizing a database.
Normalization is the process of breaking down a table into smaller tables. So that each table deals with a single theme. There are three different kinds of modifications of anomalies and formulated the first, second and third normal forms (3NF) is considered sufficient for most practical purposes. It should be considered only after a thorough analysis and complete understanding of its implications.

3.2.2 SAFETY REQUIREMENTS

If there is extensive damage to a wide portion of the database due to catastrophic failure, such as a disk crash, the recovery method restores a past copy of the database that was backed up to archival storage (typically tape) and reconstructs a more current state by reapplying or redoing the operations of committed transactions from the backed up log, up to the time of failure.

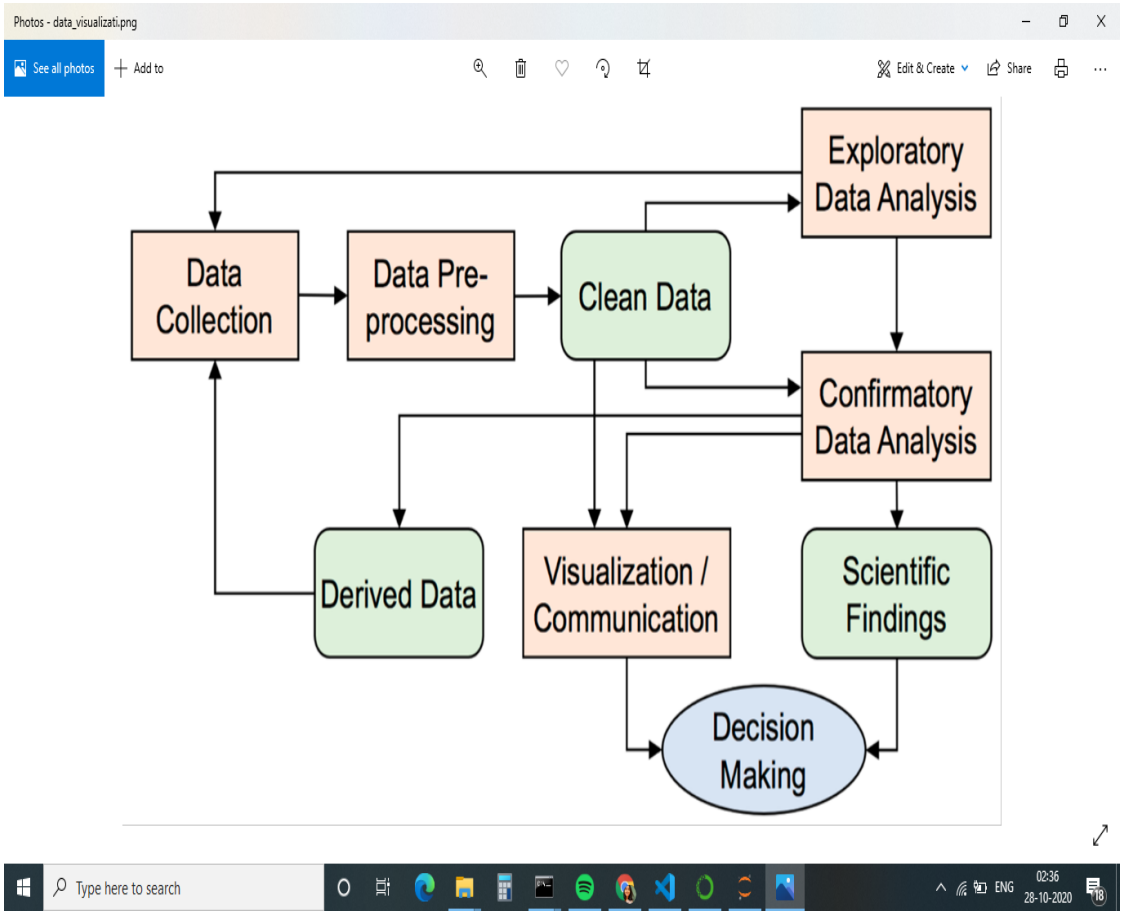
3.2.3 SECURITY REQUIREMENTS

Security systems need database storage just like many other applications. However, the special requirements of the security market mean that vendors must choose their database partner.

3.2.3 SOFTWARE QUALITY ATTRIBUTES

- **AVAILABILITY:** The flight should be available on the specified date and specified time as many customers are doing advance reservations.
- **CORRECTNESS:** The flight should reach start from correct start terminal and should reach the correct destination.
- **MAINTAINABILITY:** The administrators and flight in chargers should maintain correct schedules of flights.
- **USABILITY:** The flight schedules should satisfy a maximum number of customer's needs.

3.3 Modules in Project (Block Diagram/Model)



1. The data is cleaned, wrangled and then Exploratory Data Analysis is performed using python and its libraries.

2. Identified trends in the transactions performed in relation to users data parameters like :
1. Value
2. Export
3. Import
4. Country
5. Year

2. Presented findings with relevant statistics and visualizations using the matplotlib and seaborn libraries.

3.4 Database Design (ERD)

The datasets used in this project have been chosen from:
https://www.kaggle.com/lakshyaag/india-trade-data?select=2018-2010_export.csv

The dataset consists of trade values for export and import of commodities in million US$. The dataset is tidy and each row consists of a single observation.

In both the files we have 5 columns each are HSCode, Commodity, value, county, year.

What is an HS Code?

HSCode:- HS stands for Harmonized System. It was developed by the WCO (World Customs Organization) as a multipurpose international product nomenclature that describes the type of good that is shipped.

HS Code Structure

The HS code can be described as follows:

- It is a six-digit identification code.
- It has 5000 commodity groups.
- Those groups have 99 chapters.
- Those chapters have 21 sections.
- It's arranged in a legal and logical structure.
- Well-defined rules support it to realize uniform classification worldwide
- HSCode List

What is Commodity?

In economics, a commodity is defined as a tangible good that can be bought and sold or exchanged for products of similar value. Natural resources such as oil as well as basic foods like corn are two common types of commodities. Like other classes of assets such as stocks, commodities have value and can be traded on open markets. And like other assets, commodities can fluctuate in price according to supply and demand.

- **Value**: values for export and import of commodities in million US $.
- **Export**: Exports are the goods and services produced in one country and purchased by residents of another country.
- **Import**: Imports are foreign goods and services bought by residents of a country. Residents include citizens, businesses, and the government.
- **Country**: Country Imported From/ Exported To
- **Year**: Year in which commodities where Imported/Exported which is in between 2010 to 2018.

Chapter 4

Results

4.1 Sample Database Tables

****Preview of Export Data:****

	HSCode	Commodity	value	country	year
120775	9	COFFEE, TEA, MATE AND SPICES.	0.13	TOGO	2011
36009	61	ARTICLES OF APPAREL AND CLOTHING ACCESSORIES, ...	0.16	FR POLYNESIA	2016
62263	49	PRINTED BOOKDS, NEWSPAPERS, PICTURES AND OTHER...	0.43	ANGOLA	2014
46950	82	TOOLS IMPLEMENTS, CUTLERY, SPOONS AND FORKS, O...	0.02	ANDORRA	2015
29493	56	WADDING, FELT AND NONWOVENS; SPACIAL YARNS; TW...	0.00	TAJIKISTAN	2017

****Preview of Import Data:****

	HSCode	Commodity	value	country	year
27771	96	MISCELLANEOUS MANUFACTURED ARTICLES.	0.00	COTE D' IVOIRE	2015
42268	24	TOBACCO AND MANUFACTURED TOBACCO SUBSTITUTES.	0.00	UNSPECIFIED	2014
41059	63	OTHER MADE UP TEXTILE ARTICLES; SETS; WORN CLO...	NaN	ST KITT N A	2014
15815	52	COTTON.	0.95	TAJIKISTAN	2017
73629	70	GLASS AND GLASSWARE.	0.00	PUERTO RICO	2010

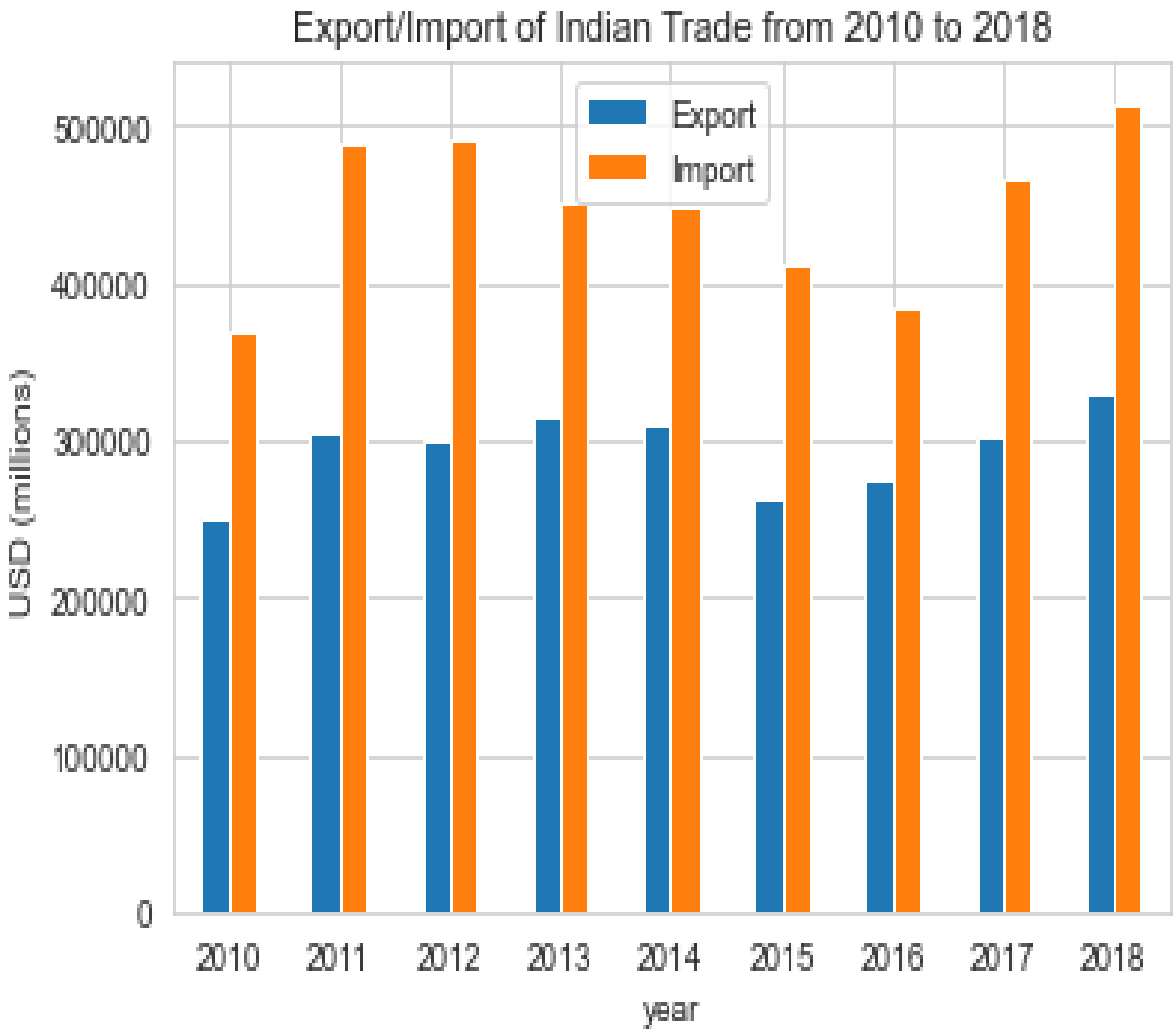
****Variable Description of export dataset : ****

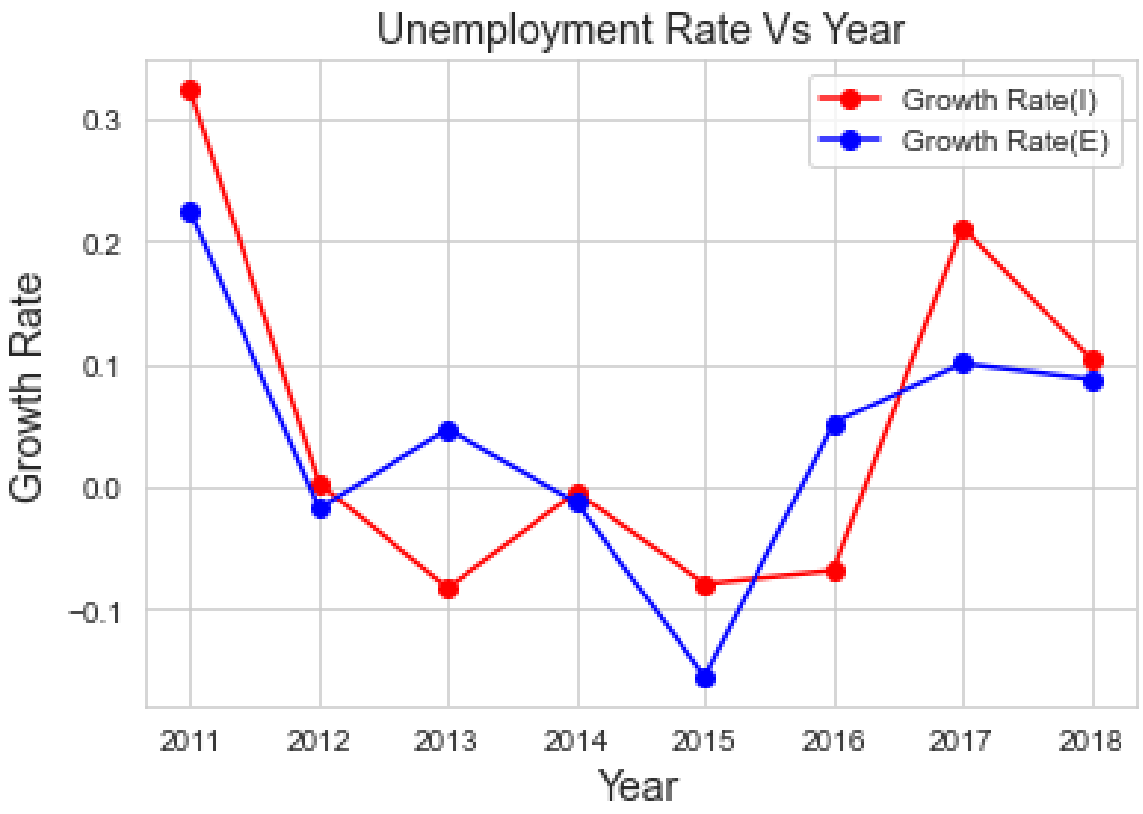
	Name	dtypes	Missing	Uniques	First Value	Second Value	Third Value
0	HSCode	int64	0	98	2	3	4
1	Commodity	object	0	98	MEAT AND EDIBLE MEAT OFFAL.	FISH AND CRUSTACEANS, MOLLUSCS AND OTHER AQUAT...	DAIRY PRODUCE; BIRDS' EGGS; NATURAL HONEY; EDI...
2	value	float64	14038	10687	0.18	0	12.48
3	country	object	0	248	AFGHANISTAN TIS	AFGHANISTAN TIS	AFGHANISTAN TIS
4	year	int64	0	9	2018	2018	2018

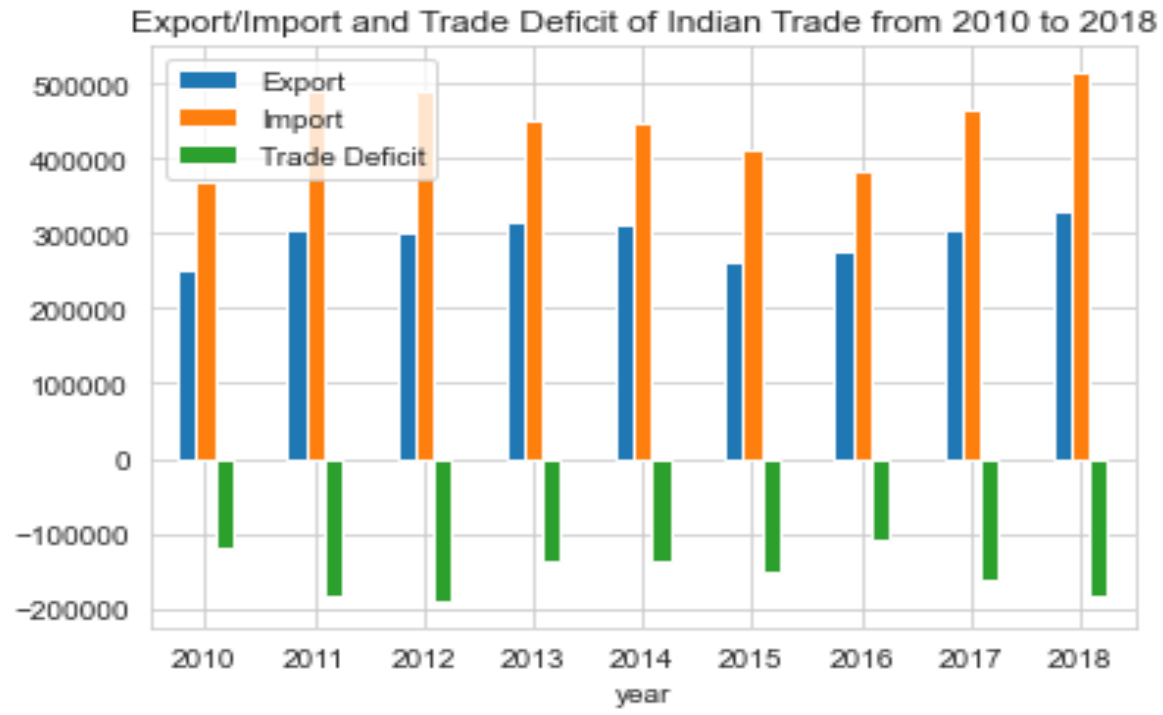
****Variable Description of import dataset : ****

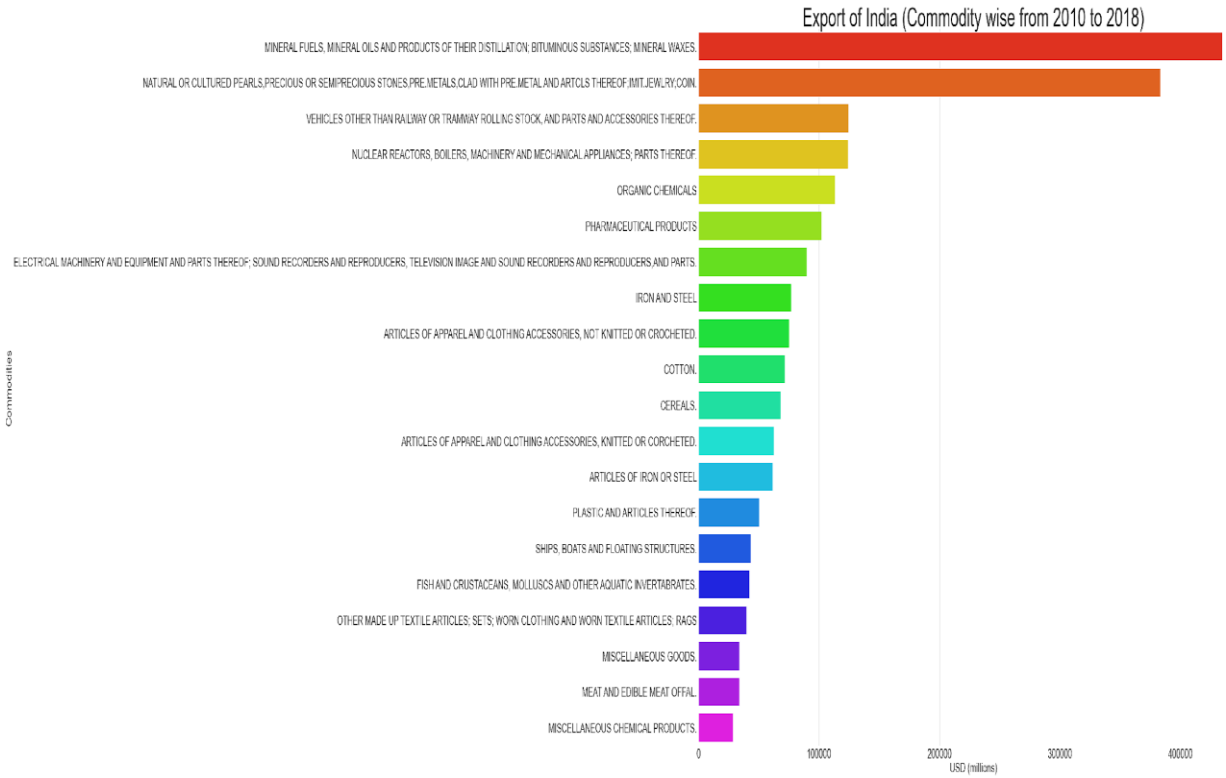
	Name	dtypes	Missing	Uniques	First Value	Second Value	Third Value
0	HSCode	int64	0	98	5	7	8
1	Commodity	object	0	98	PRODUCTS OF ANIMAL ORIGIN, NOT ELSEWHERE SPECI...	EDIBLE VEGETABLES AND CERTAIN ROOTS AND TUBERS.	EDIBLE FRUIT AND NUTS; PEEL OR CITRUS FRUIT OR...
2	value	float64	11588	9015	0	12.38	268.6
3	country	object	0	242	AFGHANISTAN TIS	AFGHANISTAN TIS	AFGHANISTAN TIS
4	year	int64	0	9	2018	2018	2018

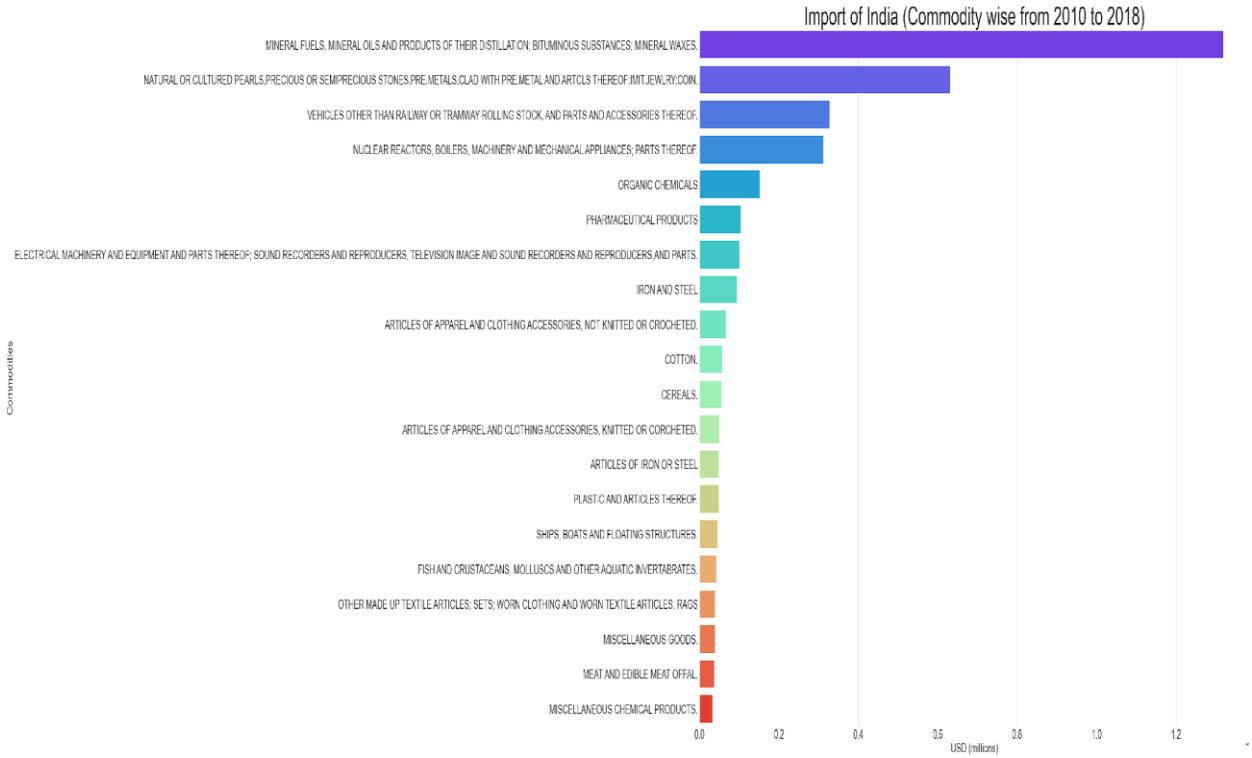
4.2 Output Graphs/ Tables :

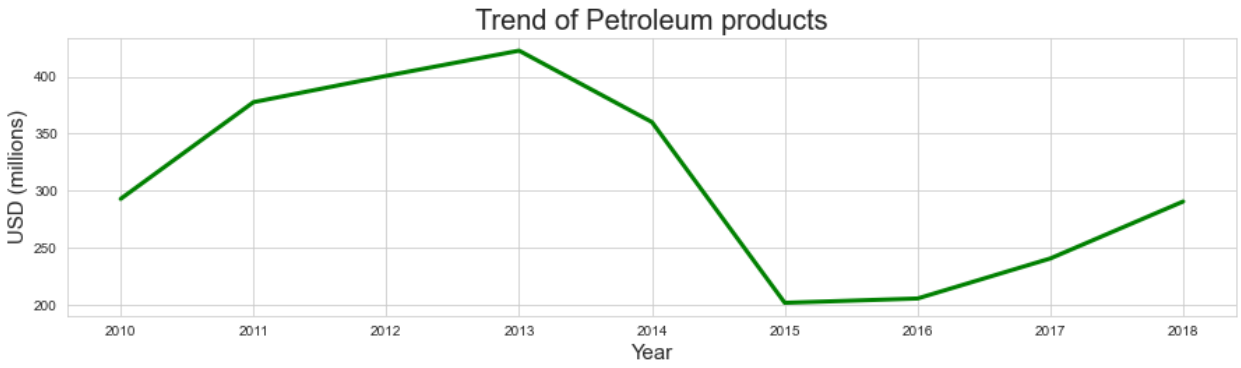


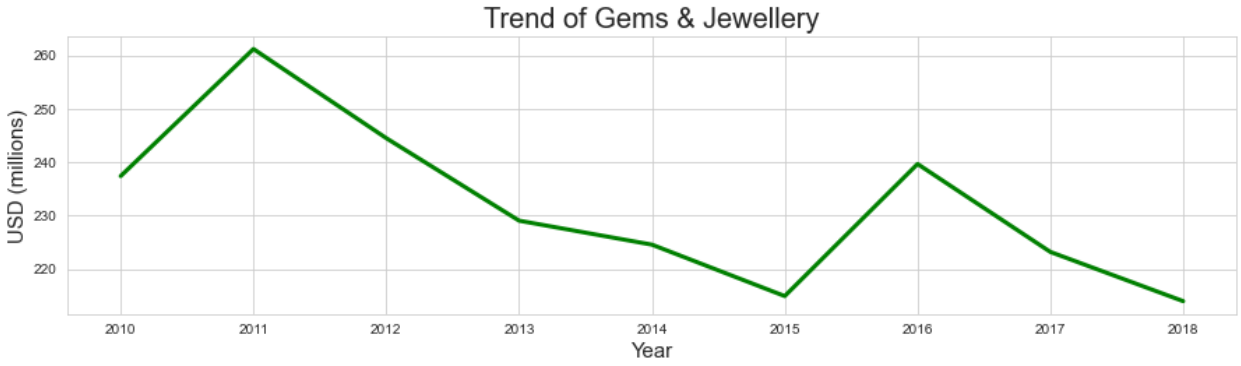

Unemployment Rate Vs Year
Growth Rate(I)
Growth Rate(E)
Growth Rate
0.3
0.2
0.1
0.0
−0.1
2011
2012
2013
2014
2015
2016
2017
2018
Year

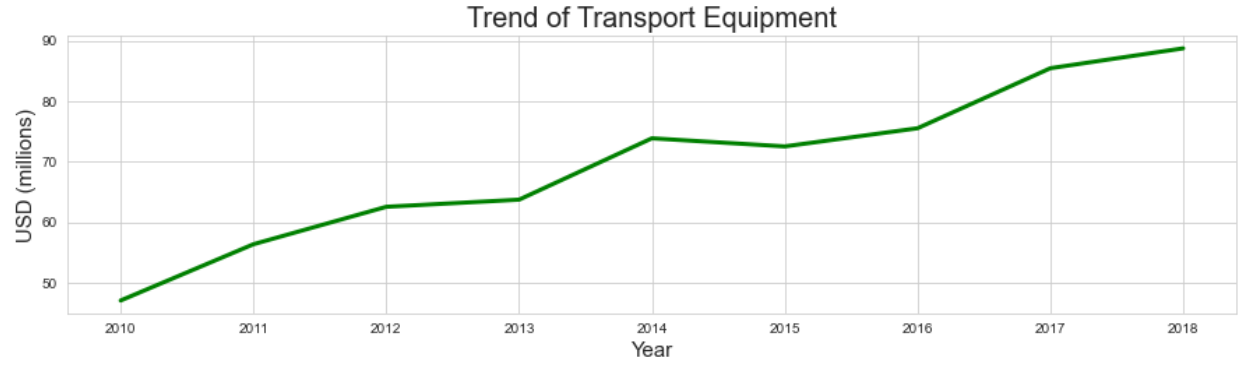

Export/Import and Trade Deficit of Indian Trade from 2010 to 2018
Export
Import
Trade Deficit
500000
400000
300000
200000
100000
0
−100000
−200000
2010
2011
2012
2013
2014
2015
2016
2017
2018
year

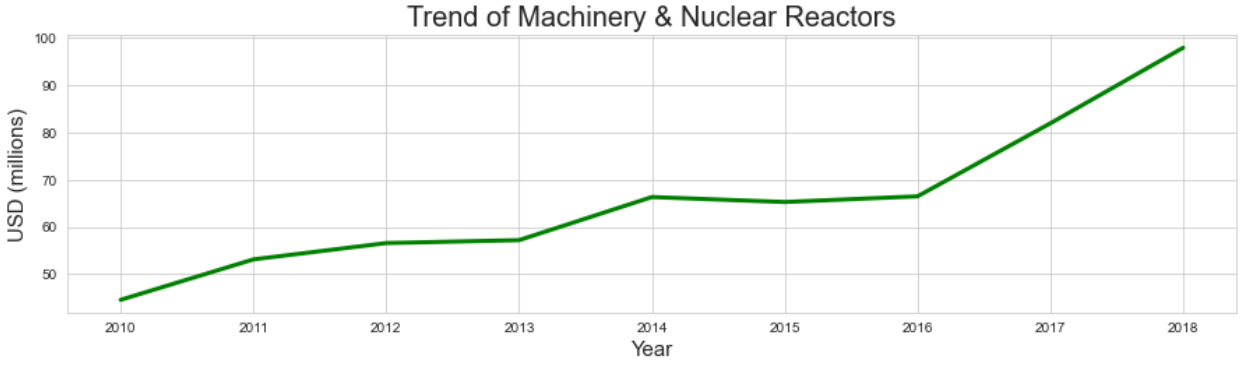

Export of India (Commodity wise from 2010 to 2018)
MINERAL FUELS, MINERAL OILS AND PRODUCTS OF THEIR DISTILLATION; BITUMINOUS SUBSTANCES; MINERAL WAXES.
NATURAL OR CULTURED PEARLS,PRECIOUS OR SEMIPRECIOUS STONES,PRE.METALS,CLAD WITH PRE.METAL AND ARTCLS THEREOF;IMIT.JEWLRY;COIN.
VEHICLES OTHER THAN RAILWAY OR TRAMWAY ROLLING STOCK, AND PARTS AND ACCESSORIES THEREOF.
NUCLEAR REACTORS, BOILERS, MACHINERY AND MECHANICAL APPLIANCES; PARTS THEREOF.
ORGANIC CHEMICALS
PHARMACEUTICAL PRODUCTS
ELECTRICAL MACHINERY AND EQUIPMENT AND PARTS THEREOF; SOUND RECORDERS AND REPRODUCERS, TELEVISION IMAGE AND SOUND RECORDERS AND REPRODUCERS,AND PARTS.
IRON AND STEEL
ARTICLES OF APPAREL AND CLOTHING ACCESSORIES, NOT KNITTED OR CROCHETED.
COTTON.
CEREALS.
ARTICLES OF APPAREL AND CLOTHING ACCESSORIES, KNITTED OR CORCHETED.
ARTICLES OF IRON OR STEEL
PLASTIC AND ARTICLES THEREOF
SHIPS, BOATS AND FLOATING STRUCTURES.
FISH AND CRUSTACEANS, MOLLUSCS AND OTHER AQUATIC INVERTABRATES.
OTHER MADE UP TEXTILE ARTICLES; SETS; WORN CLOTHING AND WORN TEXTILE ARTICLES; RAGS.
MISCELLANEOUS GOODS.
MEAT AND EDIBLE MEAT OFFAL.
MISCELLANEOUS CHEMICAL PRODUCTS.
Commodities
0
100000
200000
300000
400000
USD (millions)

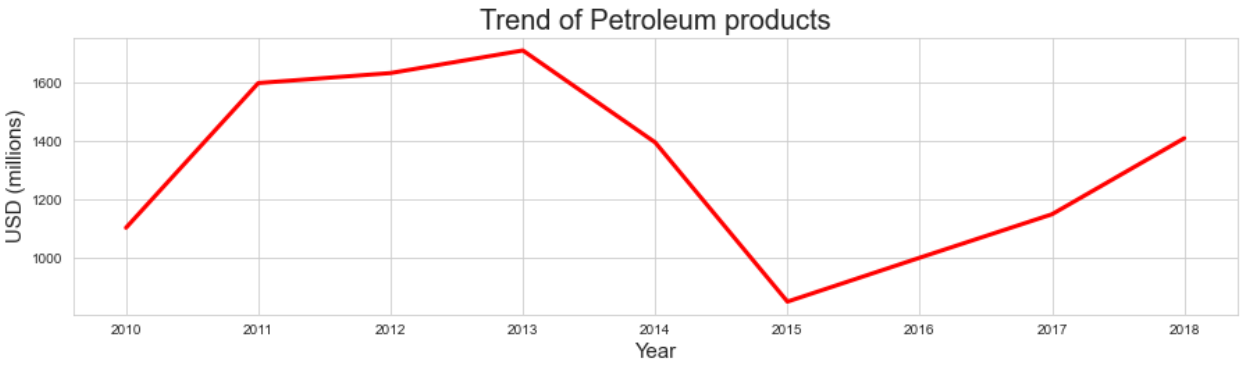

Import of India (Commodity wise from 2010 to 2018)
MINERAL FUELS, MINERAL OILS AND PRODUCTS OF THEIR DISTILLATION; BITUMINOUS SUBSTANCES; MINERAL WAXES.
NATURAL OR CULTURED PEARLS,PRECIOUS OR SEMIPRECIOUS STONES,PRE.METALS,CLAD WITH PRE.METAL AND ARTCLS THEREOF;IMIT.JEWLRY;COIN.
VEHICLES OTHER THAN RAILWAY OR TRAMWAY ROLLING STOCK, AND PARTS AND ACCESSORIES THEREOF.
NUCLEAR REACTORS, BOILERS, MACHINERY AND MECHANICAL APPLIANCES; PARTS THEREOF.
ORGANIC CHEMICALS
PHARMACEUTICAL PRODUCTS
ELECTRICAL MACHINERY AND EQUIPMENT AND PARTS THEREOF; SOUND RECORDERS AND REPRODUCERS, TELEVISION IMAGE AND SOUND RECORDERS AND REPRODUCERS,AND PARTS.
IRON AND STEEL
ARTICLES OF APPAREL AND CLOTHING ACCESSORIES, NOT KNITTED OR CROCHETED.
COTTON.
CEREALS.
ARTICLES OF APPAREL AND CLOTHING ACCESSORIES, KNITTED OR CORCHETED.
ARTICLES OF IRON OR STEEL
PLASTIC AND ARTICLES THEREOF
SHIPS, BOATS AND FLOATING STRUCTURES.
FISH AND CRUSTACEANS, MOLLUSCS AND OTHER AQUATIC INVERTABRATES.
OTHER MADE UP TEXTILE ARTICLES; SETS; WORN CLOTHING AND WORN TEXTILE ARTICLES; RAGS.
MISCELLANEOUS GOODS.
MEAT AND EDIBLE MEAT OFFAL.
MISCELLANEOUS CHEMICAL PRODUCTS.
Commodities
0.0
0.2
0.4
0.6
0.8
1.0
1.2
USD (millions)

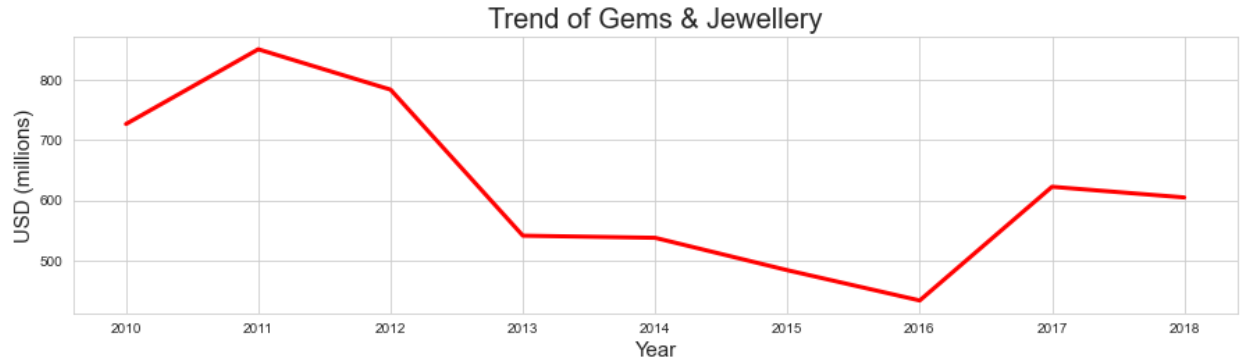

Trend of Petroleum products
USD (millions)
400
350
300
250
200
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year

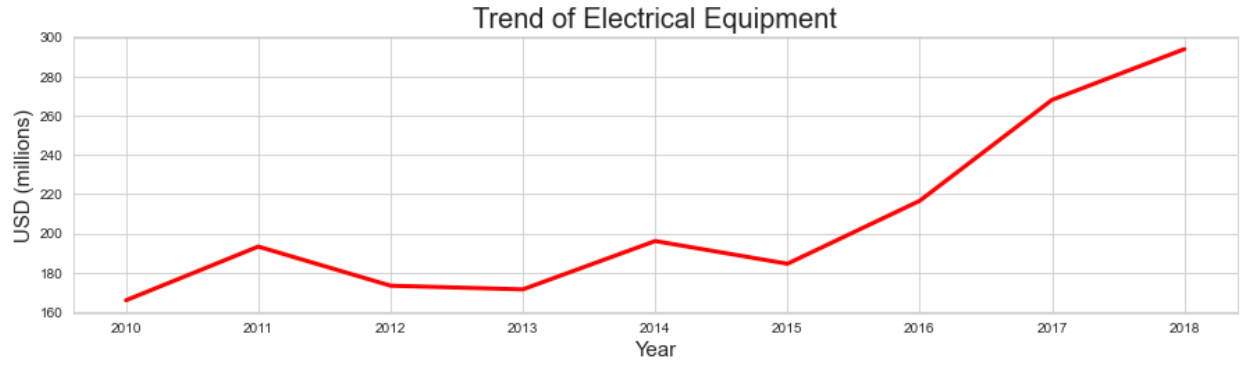

Trend of Gems & Jewellery
USD (millions)
260
250
240
230
220
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year

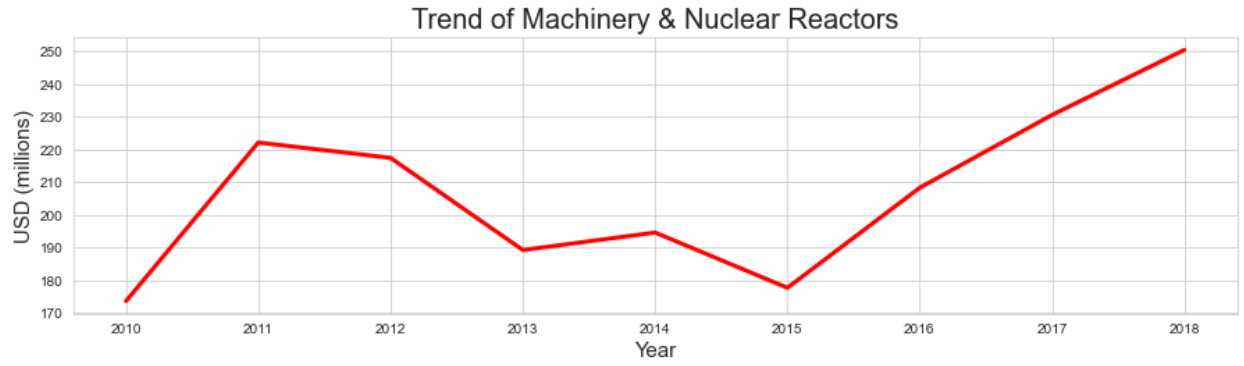

Trend of Transport Equipment
USD (millions)
90
80
70
60
50
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year

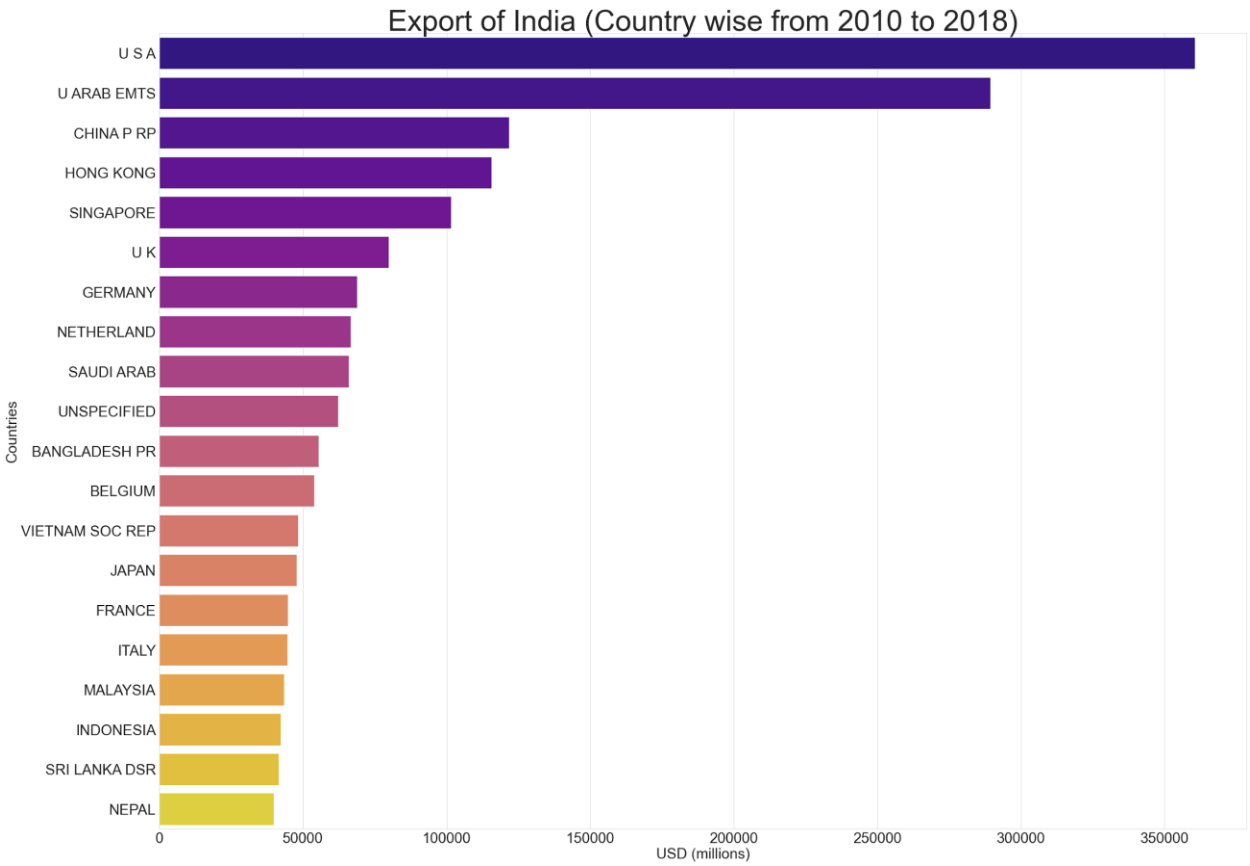

Trend of Machinery & Nuclear Reactors
USD (millions)
100
90
80
70
60
50
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year

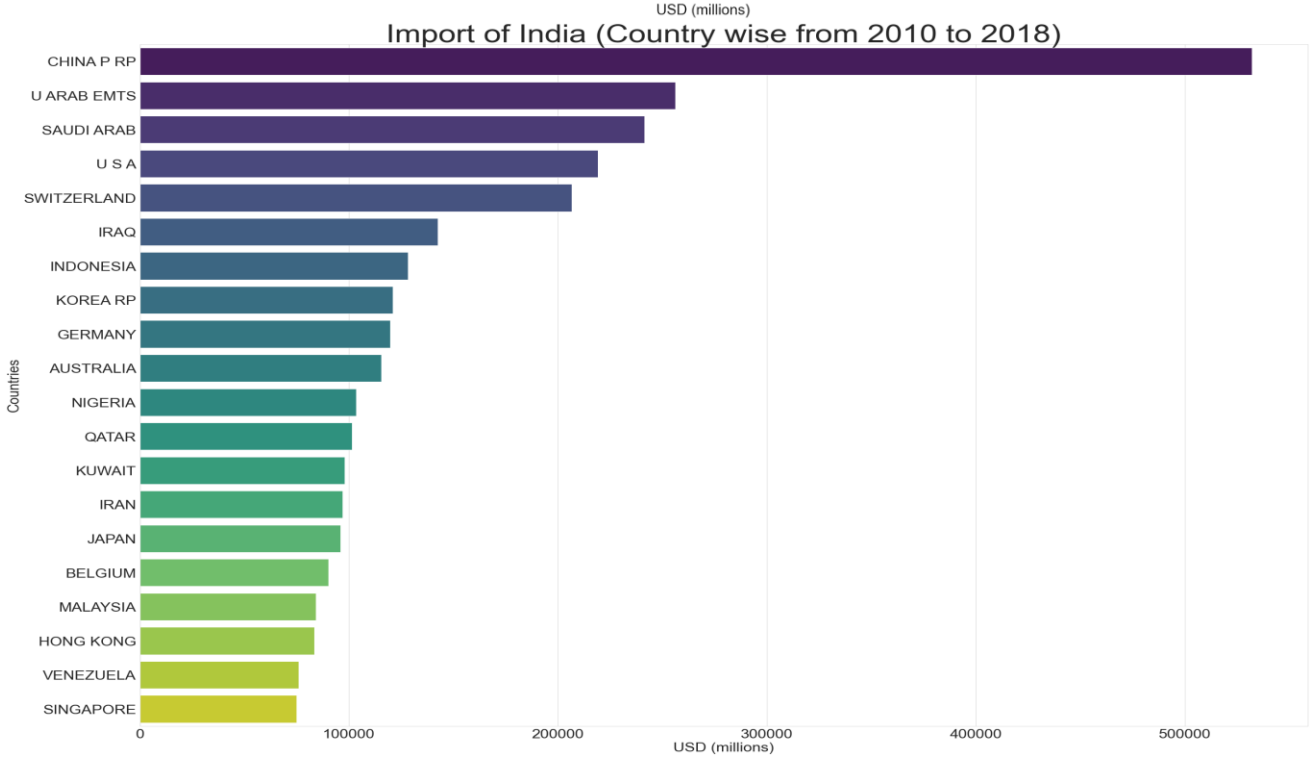

Trend of Petroleum products
USD (millions)
1600
1400
1200
1000
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year

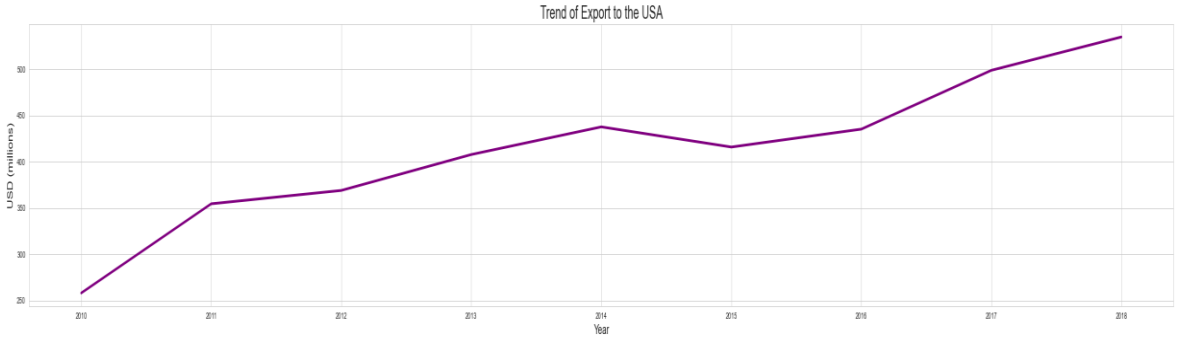

Trend of Gems & Jewellery
USD (millions)
800
700
600
500
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year

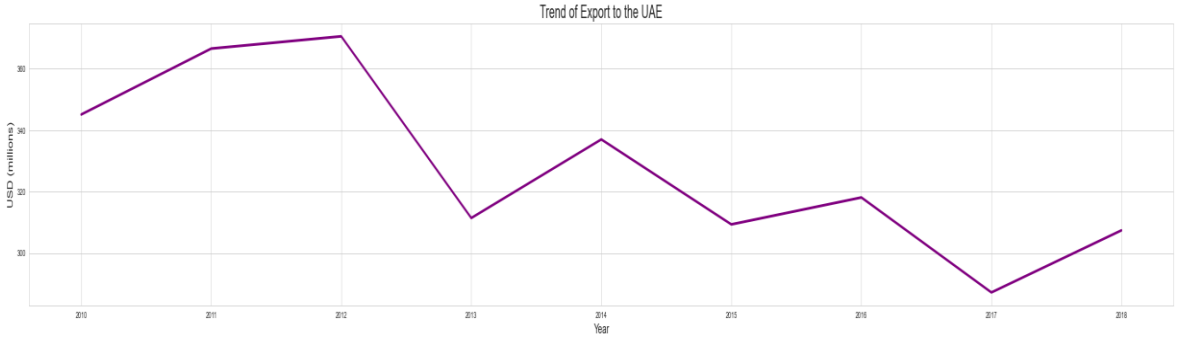

Trend of Electrical Equipment
USD (millions)
300
280
260
240
220
200
180
160
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year

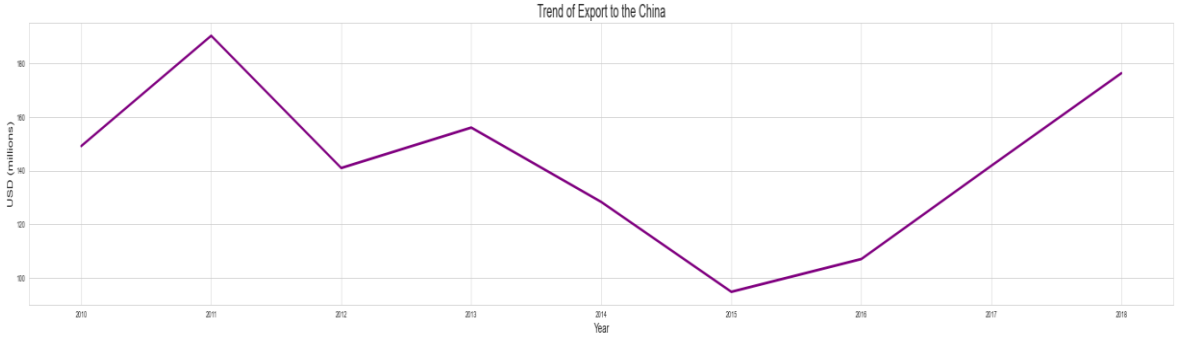

Trend of Machinery & Nuclear Reactors
USD (millions)
250
240
230
220
210
200
190
180
170
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year

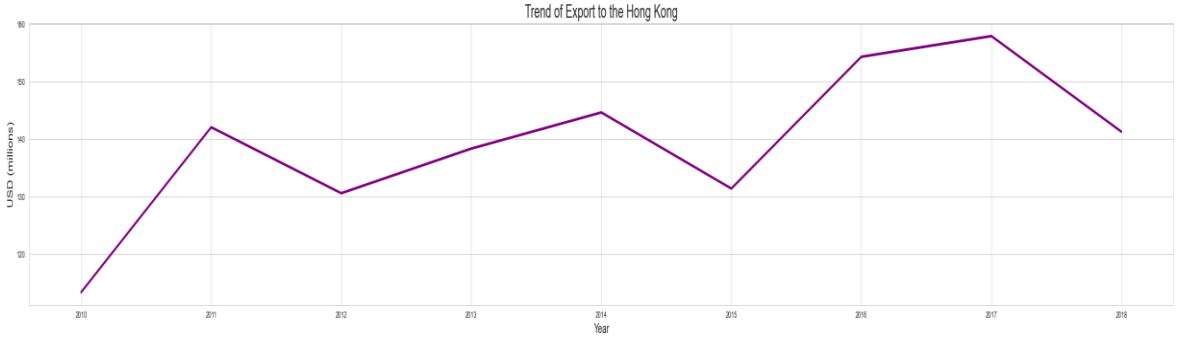

Export of India (Country wise from 2010 to 2018)
U S A
U ARAB EMTS
CHINA P RP
HONG KONG
SINGAPORE
U K
GERMANY
NETHERLAND
SAUDI ARAB
UNSPECIFIED
BANGLADESH PR
BELGIUM
VIETNAM SOC REP
JAPAN
FRANCE
ITALY
MALAYSIA
INDONESIA
SRI LANKA DSR
NEPAL
Countries
0
50000
100000
150000
200000
250000
300000
350000
USD (millions)

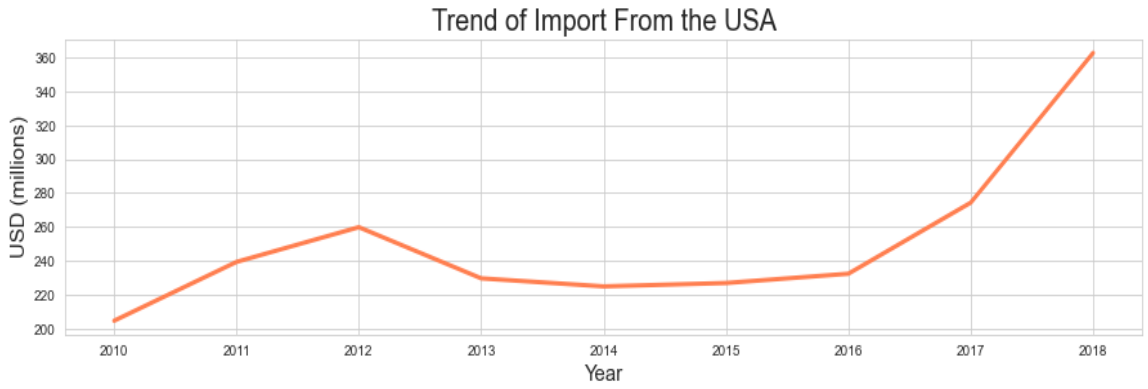

Import of India (Country wise from 2010 to 2018)
CHINA P RP
U ARAB EMTS
SAUDI ARAB
U S A
SWITZERLAND
IRAQ
INDONESIA
KOREA RP
GERMANY
AUSTRALIA
NIGERIA
QATAR
KUWAIT
IRAN
JAPAN
BELGIUM
MALAYSIA
HONG KONG
VENEZUELA
SINGAPORE
Countries
0
100000
200000
300000
400000
500000
USD (millions)

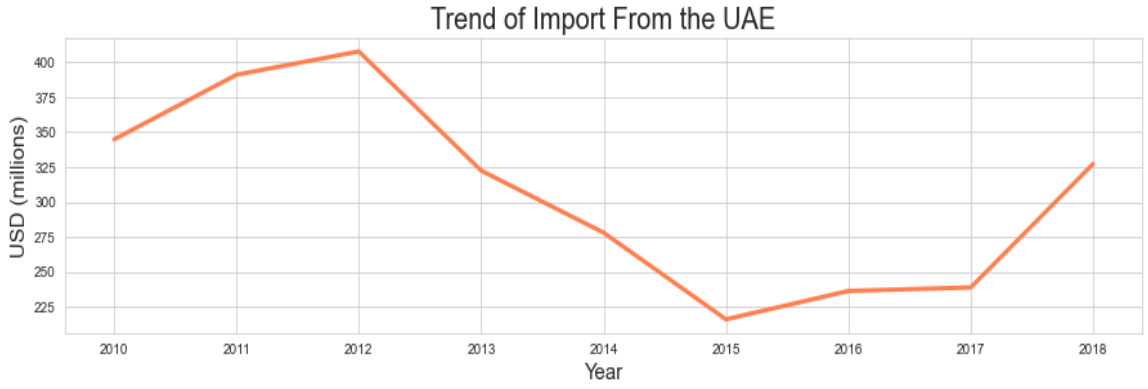

Trend of Export to the USA
USD (millions)
Year

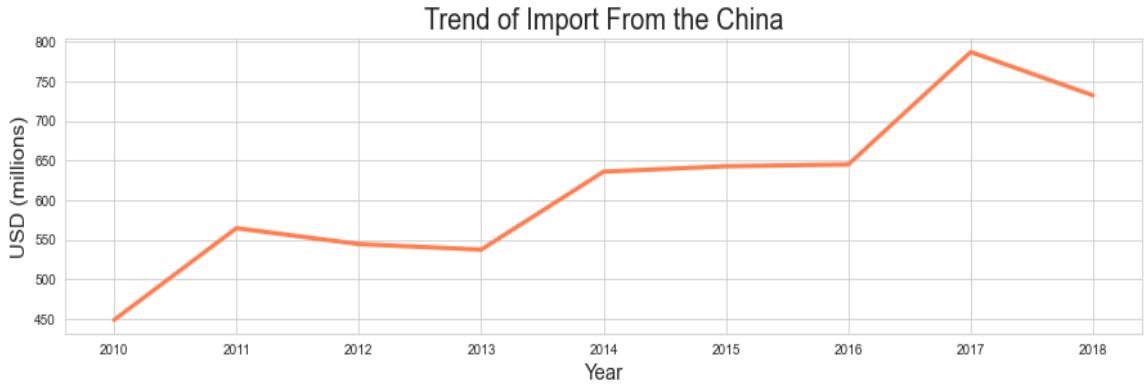

Trend of Export to the UAE
USD (millions)
Year

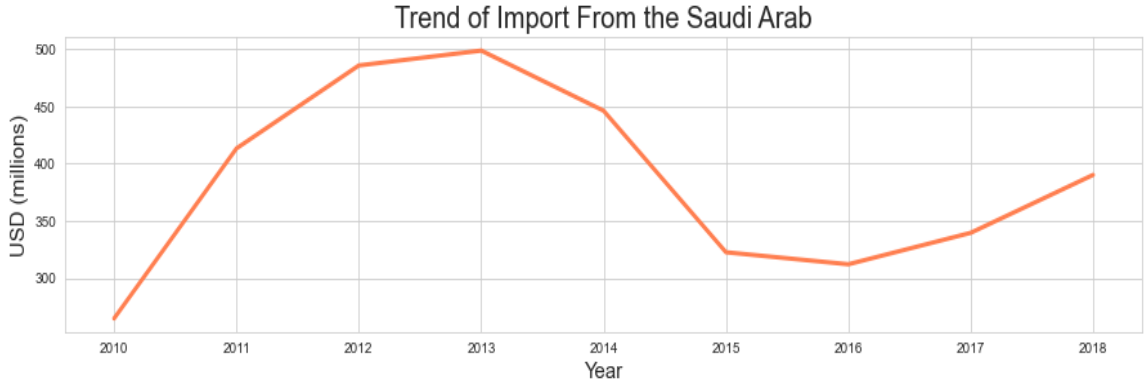

Trend of Export to the China
USD (millions)
Year


Trend of Export to the Hong Kong
USD (millions)
Year


Trend of Import From the USA
USD (millions)
360
340
320
300
280
260
240
220
200
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year


Trend of Import From the UAE
USD (millions)
400
375
350
325
300
275
250
225
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year


Trend of Import From the China
USD (millions)
800
750
700
650
600
550
500
450
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year


Trend of Import From the Saudi Arab
USD (millions)
500
450
400
350
300
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year

Direction of Foreign Trade Export in India

year	2010	2011	2012	2013	2014	2015	2016	2017	2018
country									
MOROCCO	4.031646	4.482169	5.201829	4.701951	3.978415	4.121807	4.346977	4.968161	7.815632
ANTIGUA	0.043182	0.039091	0.067000	0.103810	0.103500	0.098077	0.073333	0.066250	0.086129
JAMAICA	0.377458	0.429355	0.442985	0.565625	0.609194	0.591029	0.651061	0.779701	0.758219
LIBERIA	0.675077	1.140870	1.867206	3.622714	2.828493	1.939710	2.285000	3.478108	2.553571
PAKISTAN IR	23.993647	17.516364	24.579524	25.552247	20.865506	24.393146	20.241667	21.619551	23.482273

Direction of Foreign Trade Import in India

year	2010	2011	2012	2013	2014	2015	2016	2017	2018
country									
REUNION	0.522857	0.802286	1.067308	1.036364	1.413125	1.104706	0.731053	1.202667	1.067059
LIBYA	80.755833	7.666000	183.479000	32.251429	4.676000	0.806364	0.827778	6.289375	10.438571
ST KITT N A	NaN	0.045000	0.000000	0.001667	0.060000	0.160000	0.005000	0.000000	0.000000
FAROE IS.	3.680000	0.040000	NaN	0.000000	0.070000	0.020000	0.000000	0.010000	0.015000
COTE D' IVOIRE	7.166857	19.429583	20.221053	16.577778	28.005263	23.852917	18.232400	29.447333	27.410909

Pictorial Representation of Most Popular Country in Trade with India

Pictorial Representation of Most Popular Commodity in Trade with India

Chapter 5

Conclusion

- Exports have done well particularly from 2016 to 2018.
- The average annual growth rate in the eight years has been 4.06 per cent.
- However, imports have grown even faster in the eight years at an annual average of 20.2 per cent.
- Thus, average trade deficit widened to $-261,298.08 Million.
- The higher trade deficit could be attributed to a rise in petroleum, oil and lubricants (POL) as well as non-POL components in imports.
- The trend of petroleum's products shows a perceptible shift between 2010 to 2018. The exports of petroleum products was significant decline from 2013 to 2015.
- The exports of Gems & Jewellery also shows major decline.
- The exports of Transport Equipment and Machinery & Nuclear Reactors shows increasing trade.
- The imports of petroleum's products was significant decline from 2013 to 2015. Afterwards it showing increasing trend.
- The imports of Gems and Jewelleries showing decreasing trend.
- From 2010 to 2015, imports of Electrical Equipment and Machinery & Nuclear Reactors was low but after 2015 its shows significant increase.
- China has biggest market in India followed by UAE, Saudi Arabia and USA
- For India, USA is biggest importer followed by UAE and China Republic.
- India have trade surplus with USA, Hong Kong, and Singapore.
- India have huge trade deficit with China, Saudi Arab and Indonesia etc.
- Every year India increase her export to the USA, and the USA used to be the major trading partners of India.
- Export to the UAE shows decreasing trend from 2012 to 2017.
- Export to the China also shows decreasing trend from 2011 to 2015, afterwards its start increasing.
- Export to the Hong Kong shows a perceptible shift during the year.
- From 2010 to 2016, imports from the USA was low, after 2016 imports starts increasing.
- Imports from the UAE and Saudi Arab showing same trend. Imports falls during 2012 to 2015, after 2015 its starts increasing.
- Imports from the china is continues increasing and the China used to be the major trading partners of India.

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Author - Preeti Chikkara, Research Scholar, Department of Commerce, Maharshi Dayanand University, Rohtak, Haryana, India

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