Amazon Sales Data Analysis

By: Priyank Goswami

Week - 1

Project Title	Analyzing Amazon Sales Data
Technologies	Data Science
Domain	E-Commerce
Project Difficulties Level	Advanced

Dataset : Download Dataset

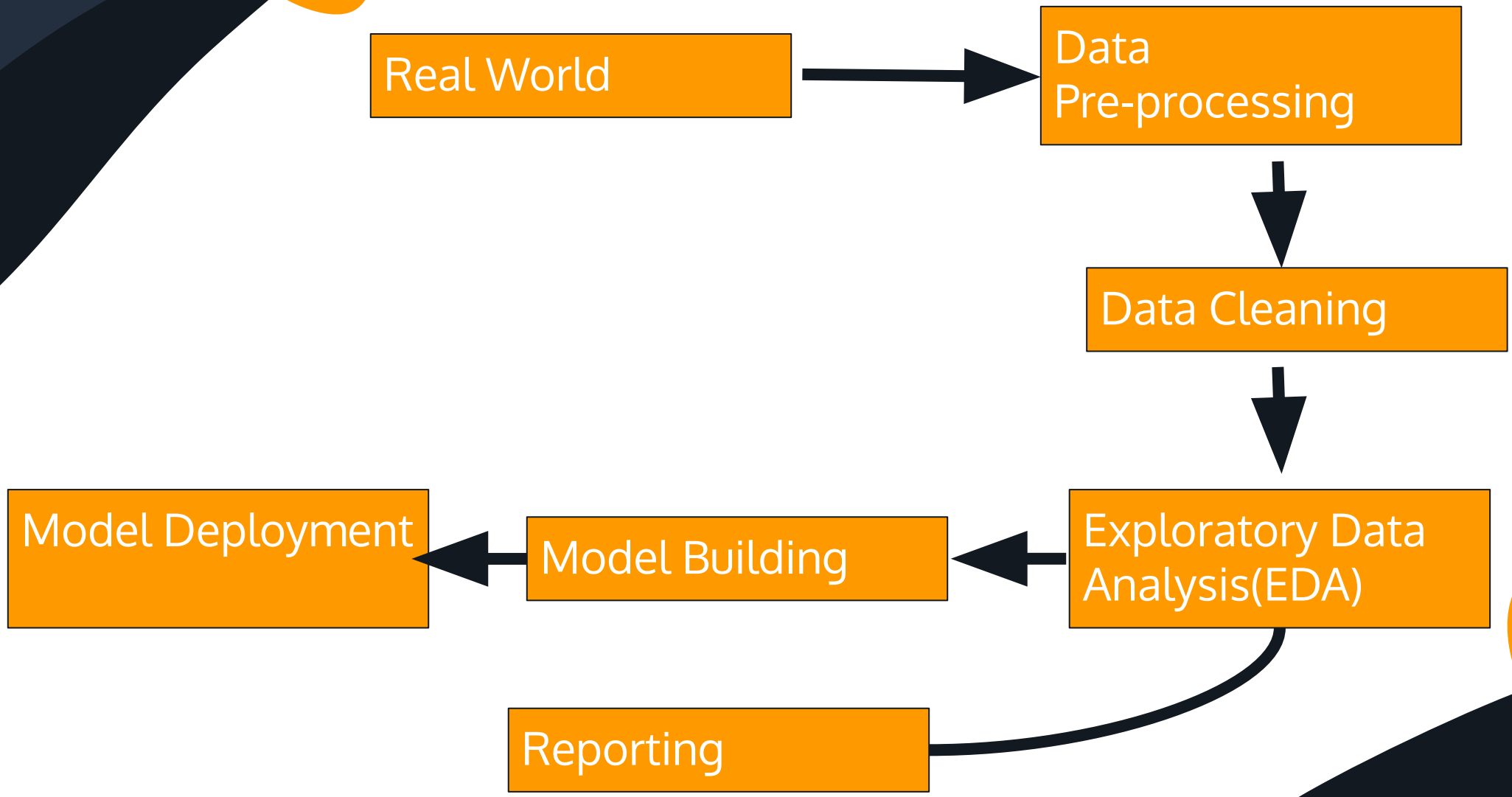
Problem Statement:

Sales management has gained importance to meet increasing competition and the need for improved methods of distribution to reduce cost and to increase profits. Sales management today is the most important function in a commercial and business enterprise.

Do ETL: Extract:

Transform-Load some Amazon dataset and find for me
Sales-trend -> month-wise, year-wise, yearly_month-wise
Find key metrics and factors and show the meaningful relationships between attributes. Do your own research and come up with your findings.

Architecture



Architecture Description

1. **Raw Data Collection :** The Dataset Provided by CollegeRanker Plateform.

2. **Data Pre-Processing :** Before building any model, it is crucial to perform data pre-processing to feed the correct data to the model to learn and predict. Model performance depends on the quality of data fed to the model to train.

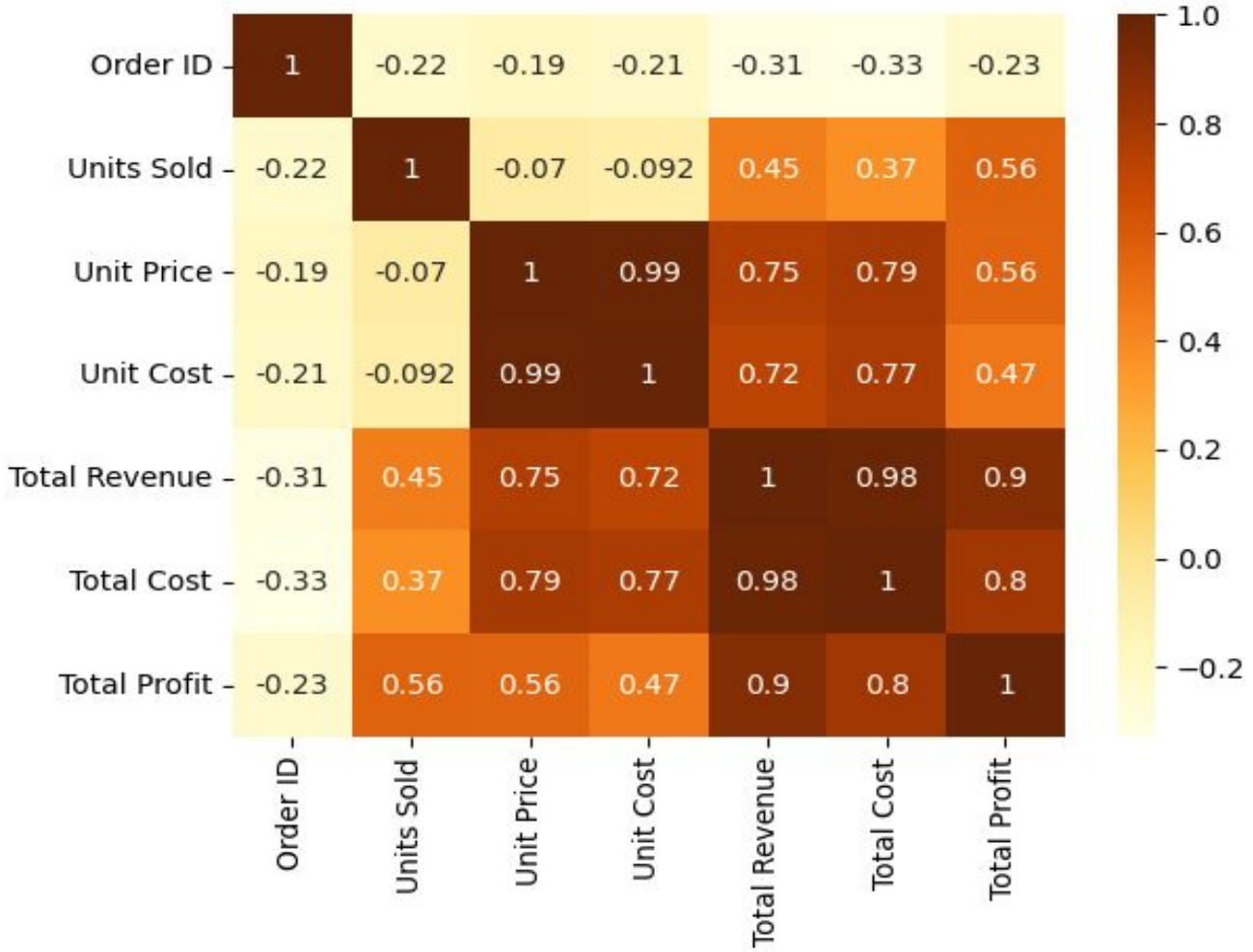
3. **Data Cleaning :** is the process of fixing or removing incorrect, corrupted, incorrectly formatted, duplicate, or incomplete data within a dataset.

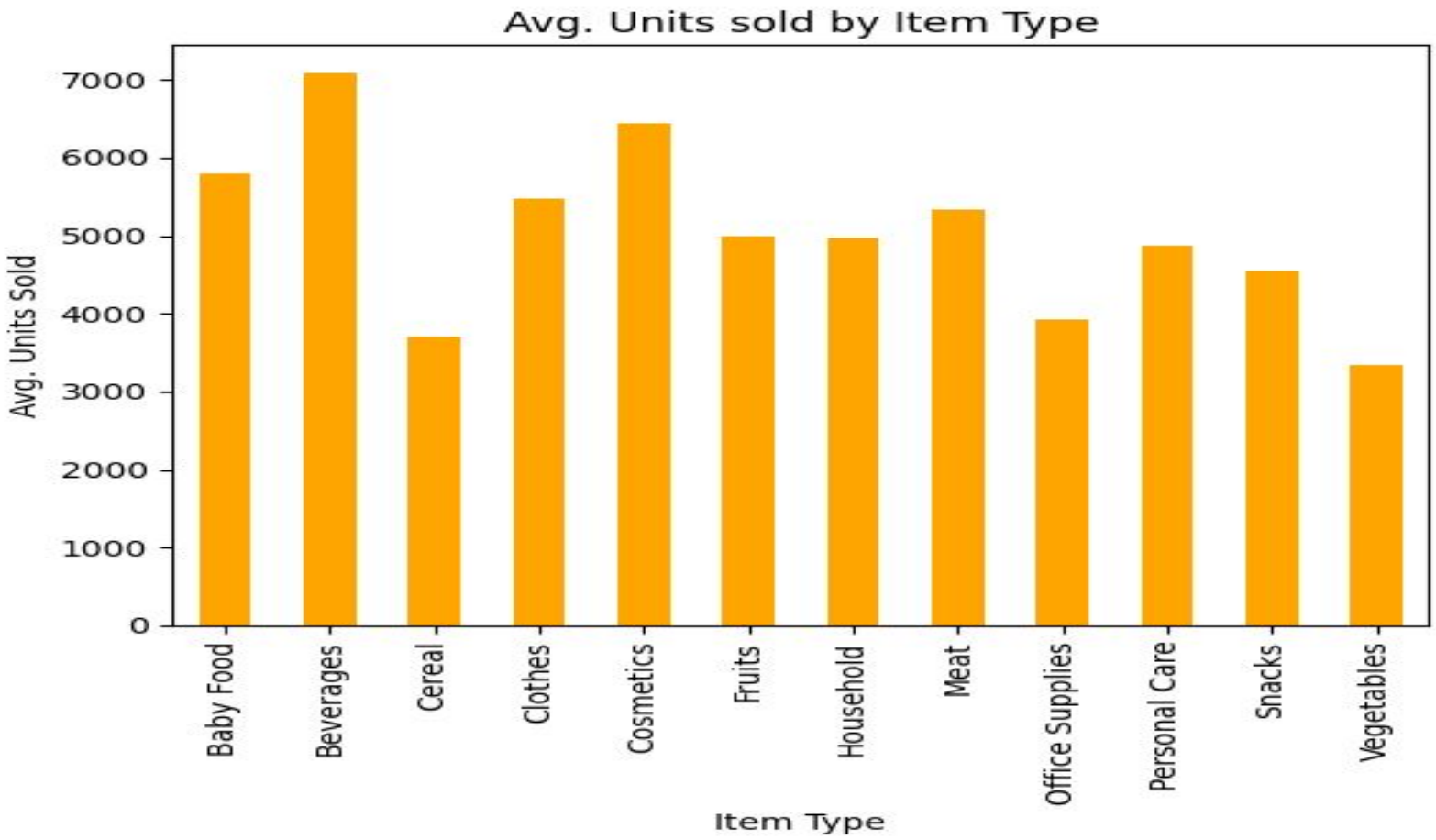
4. Exploratory Data Analysis (EDA) : refers to analyze and investigate data sets and summarize their main characteristics, often employing data visualization methods.

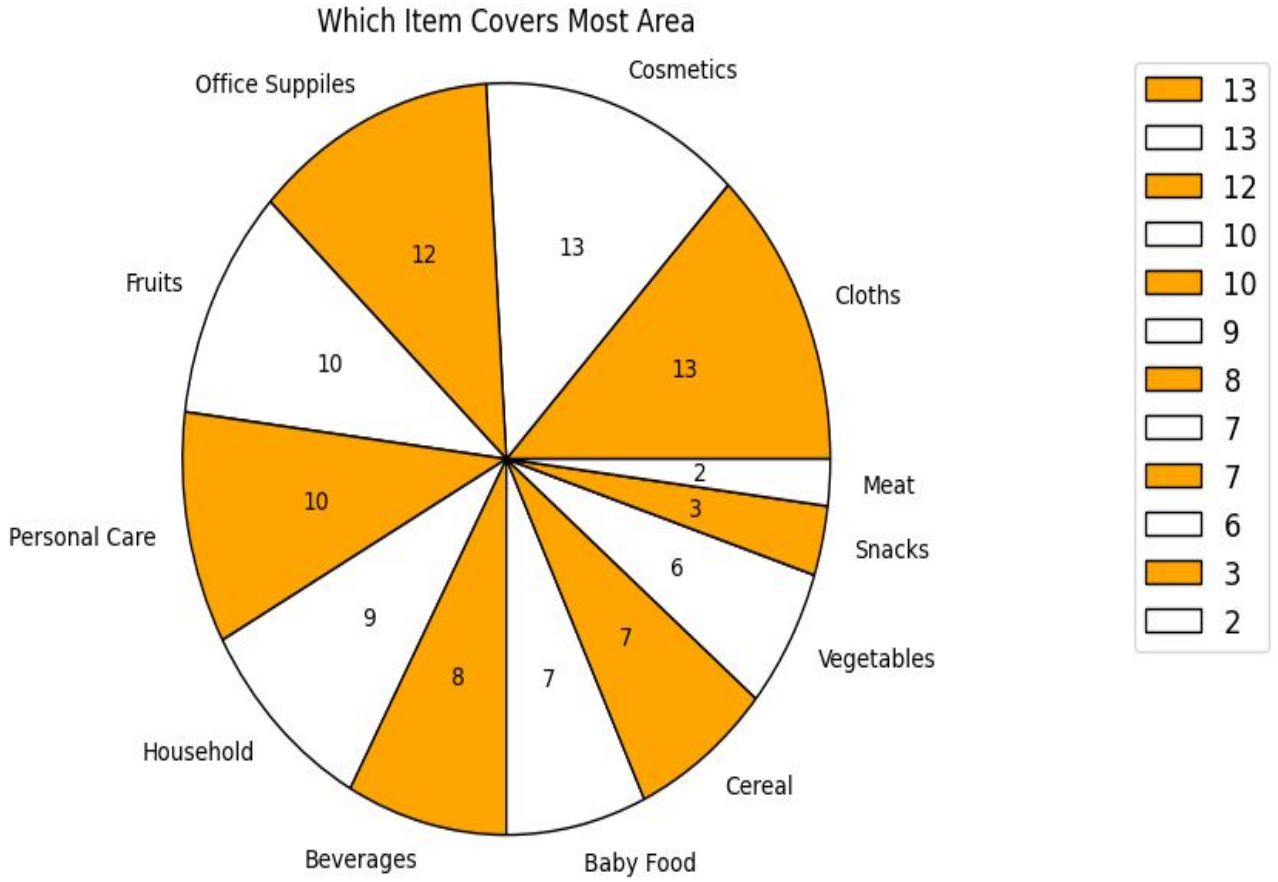
5. Reporting : is the process of collecting and formatting raw data and translating it into a digestible format to assess the ongoing performance of your organization. Your data reports can answer basic questions about the state of your business.

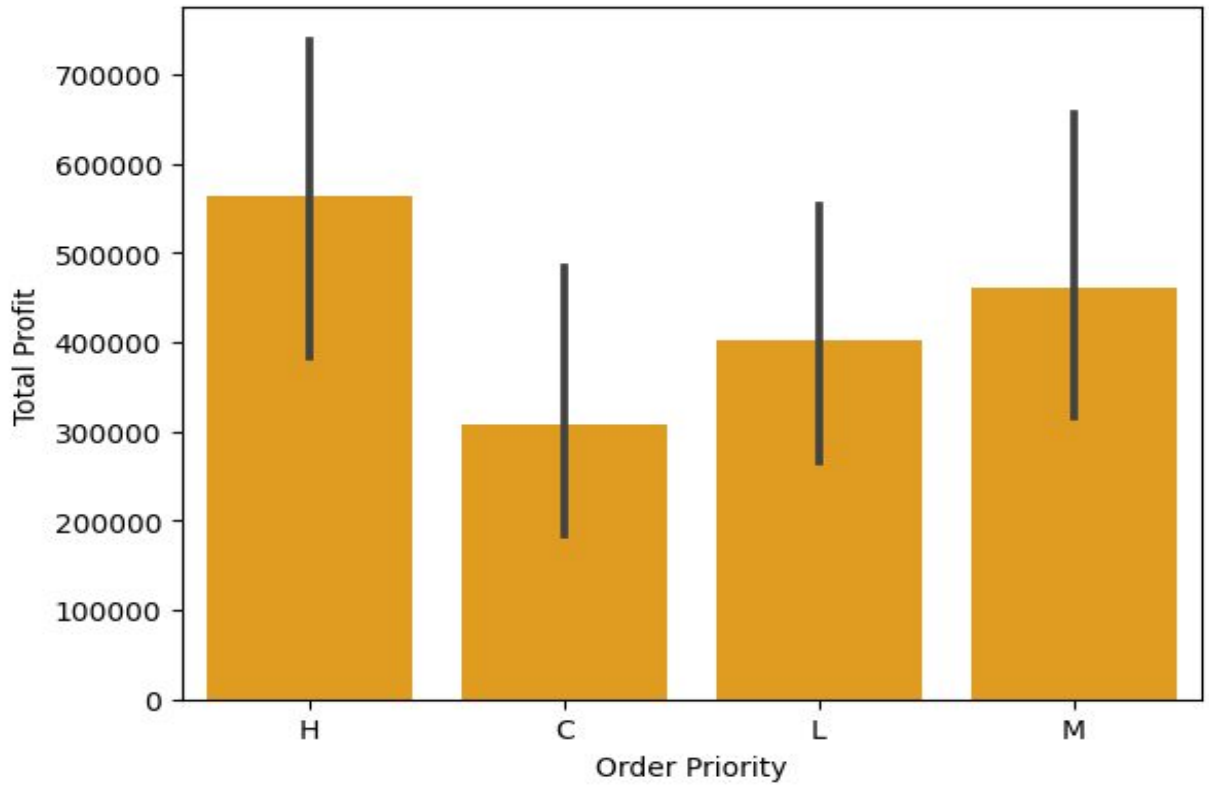
6. Dashboard : create using **PowerBi** Or **Tableau**.

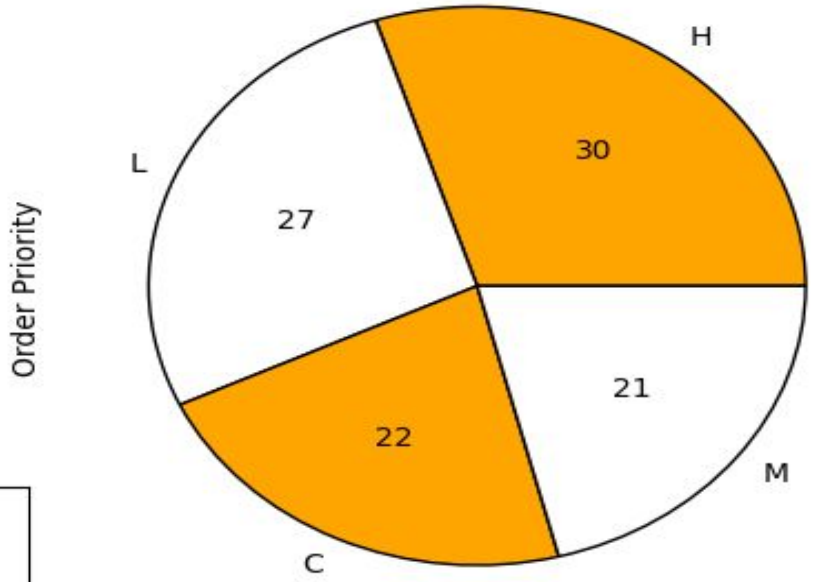
Python Graphs

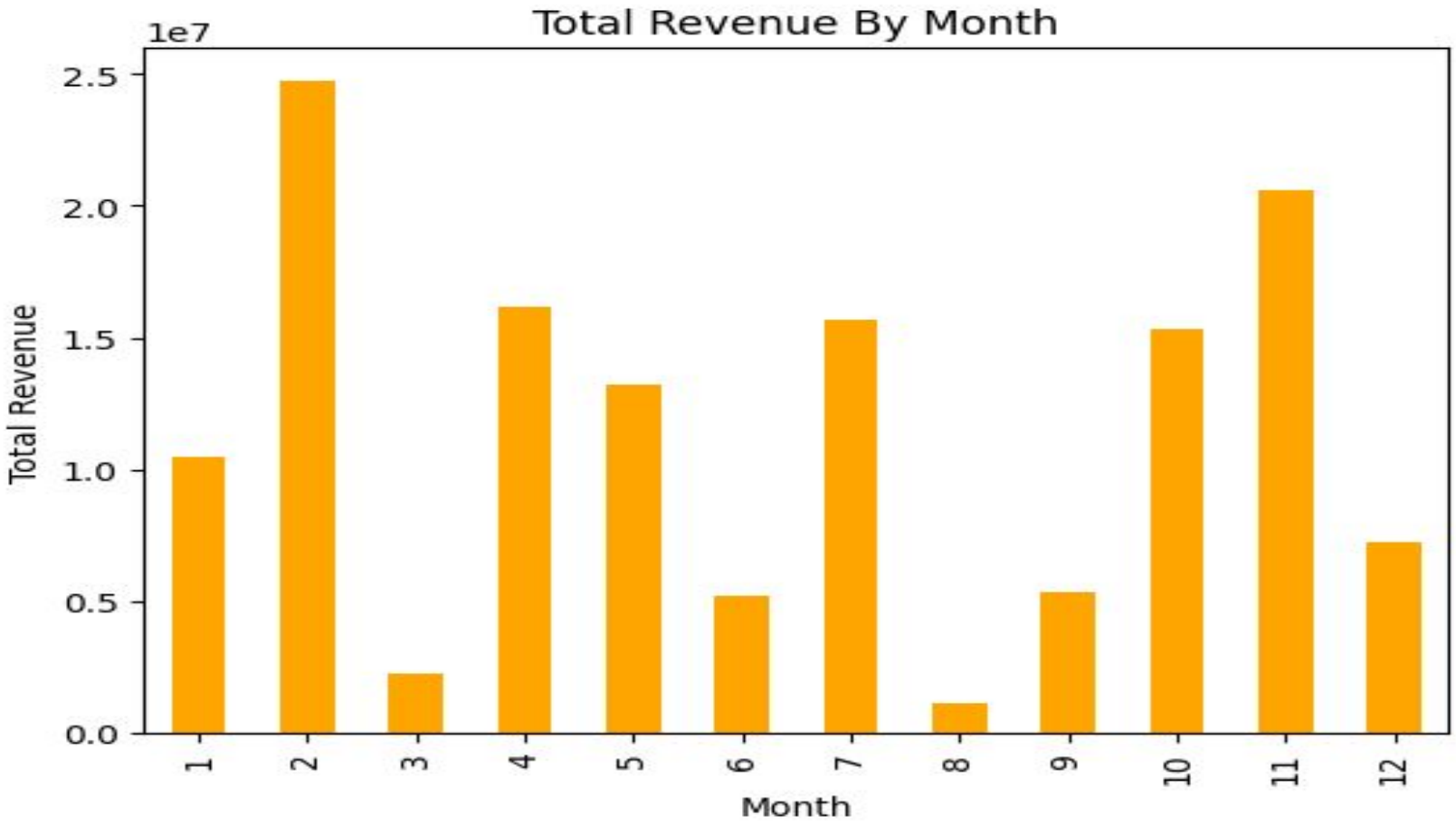


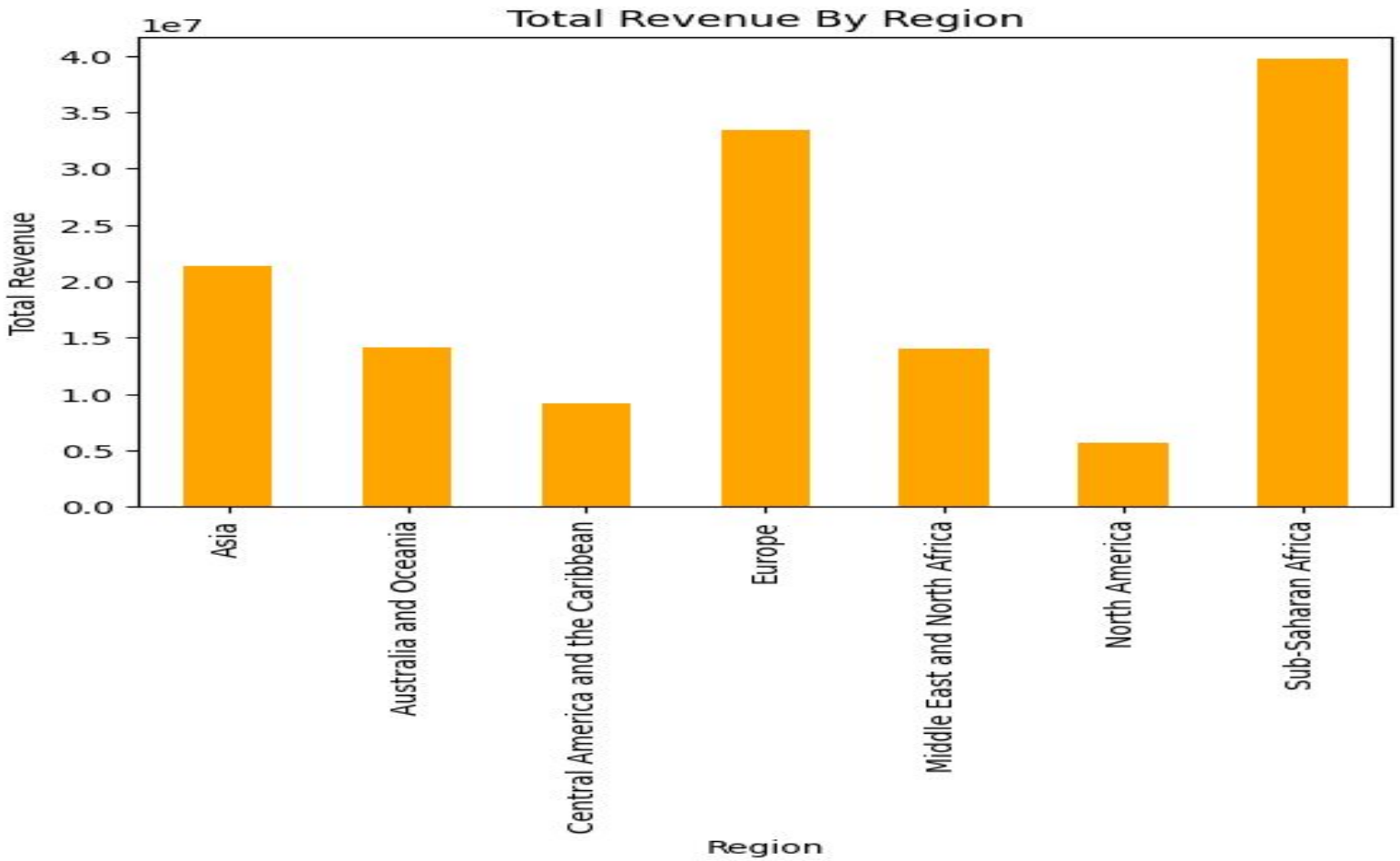

Avg. Units sold by Item Type
Avg. Units Sold
7000
6000
5000
4000
3000
2000
1000
0
Baby Food
Beverages
Cereal
Clothes
Cosmetics
Fruits
Household
Meat
Office Supplies
Personal Care
Snacks
Vegetables
Item Type

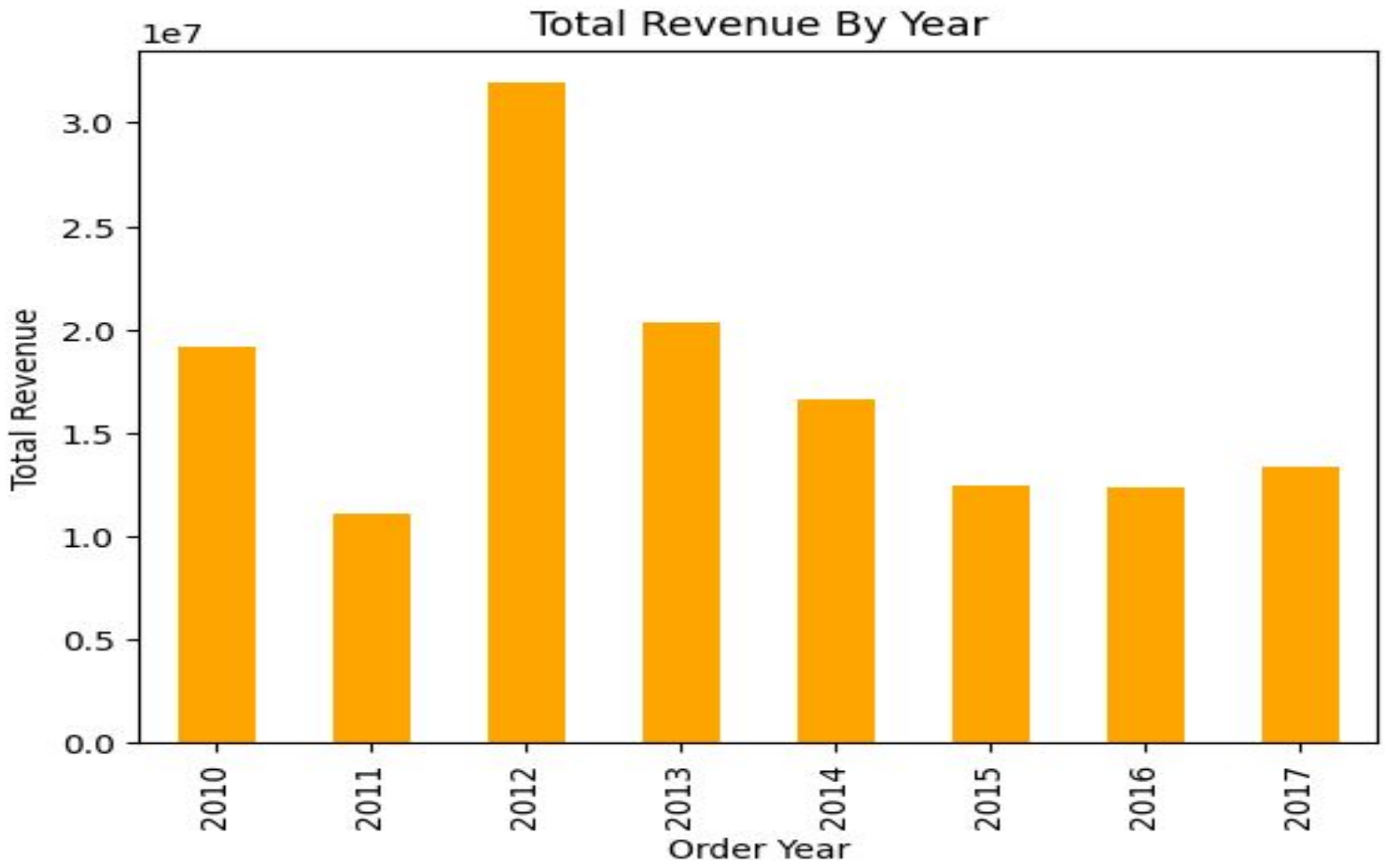

Which Item Covers Most Area
Office Suppiles
Cosmetics
Fruits
Cloths
Meat
Snacks
Personal Care
Vegetables
Household
Cereal
Beverages
Baby Food
12
13
10
13
2
3
10
6
9
7
8
7
13
13
12
10
10
9
8
7
7
6
3
2

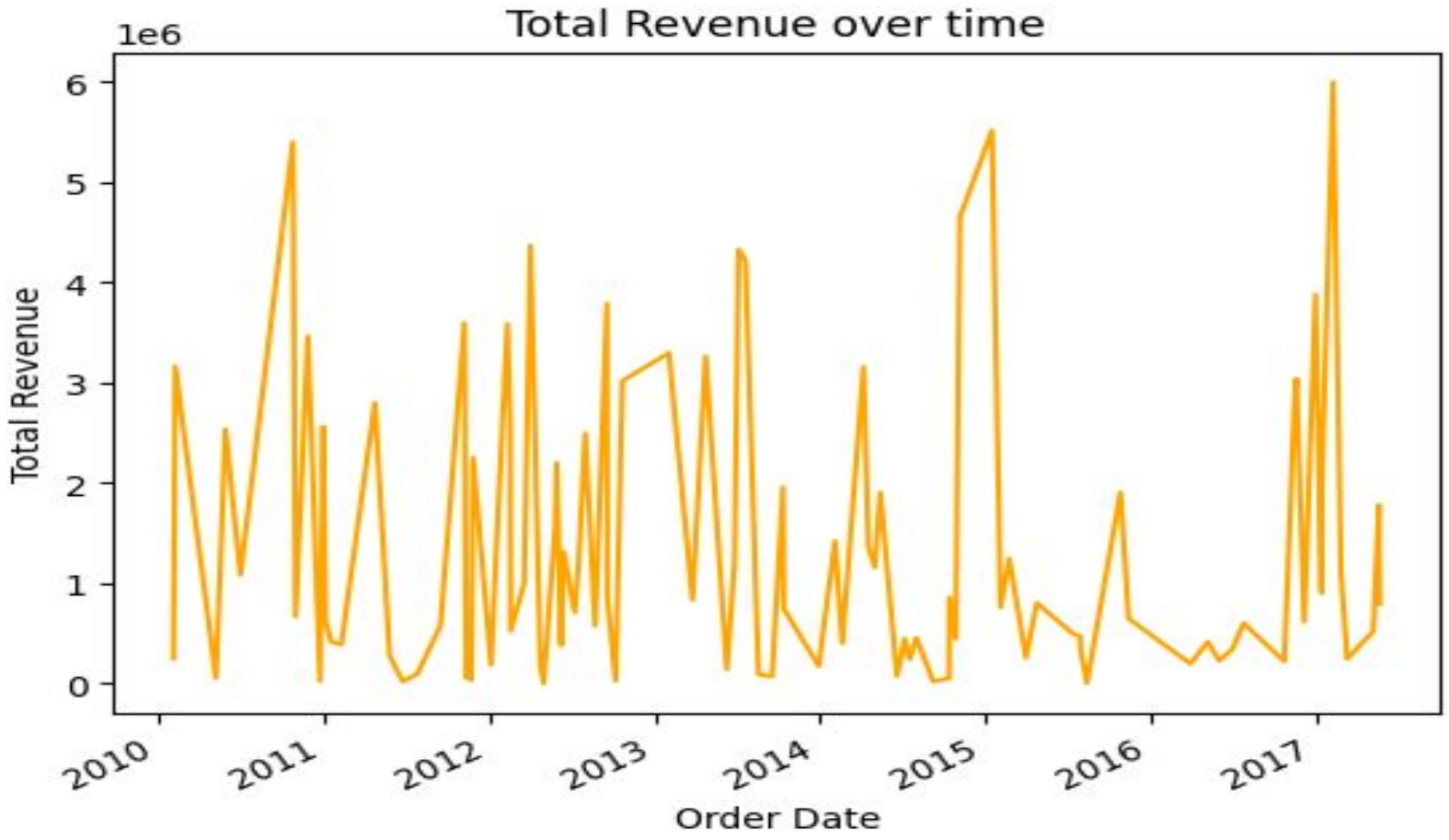

700000
600000
500000
400000
300000
200000
100000
0
Total Profit
H
C
L
M
Order Priority

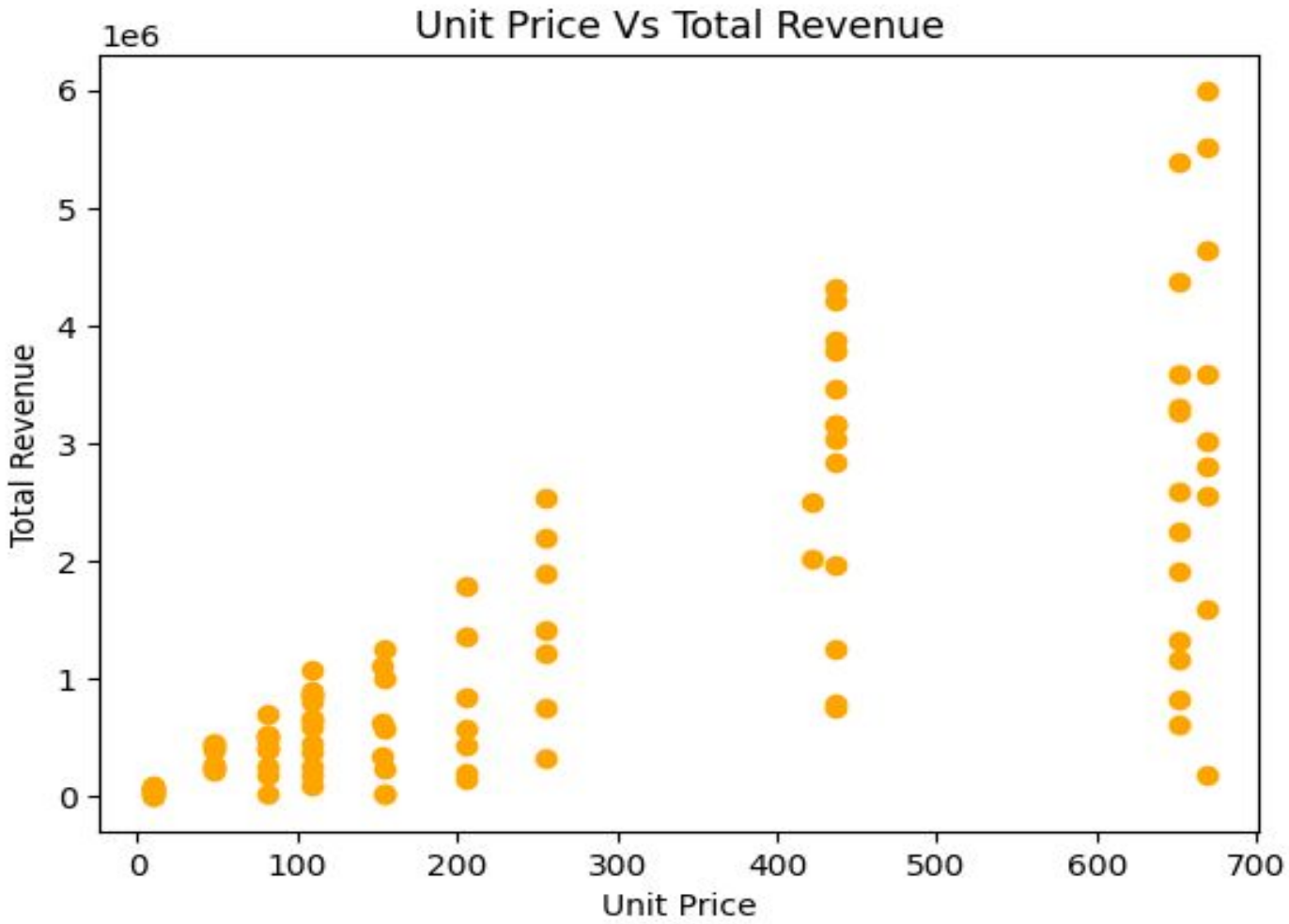

H
30
L
27
21
22
M
C
Order Priority


Total Revenue By Month
1e7
2.5
2.0
1.5
1.0
0.5
0.0
Total Revenue
1
2
3
4
5
6
7
8
9
10
11
12
Month


Total Revenue By Region
1e7
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Total Revenue
Asia
Australia and Oceania
Central America and the Caribbean
Europe
Middle East and North Africa
North America
Sub-Saharan Africa
Region


Total Revenue By Year
1e7
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Total Revenue
2010
2011
2012
2013
2014
2015
2016
2017
Order Year


Total Revenue over time
1e6
6
5
4
3
2
1
0
Total Revenue
2010
2011
2012
2013
2014
2015
2016
2017
Order Date


Unit Price Vs Total Revenue
1e6
Total Revenue
0
1
2
3
4
5
6
0
100
200
300
400
500
600
700
Unit Price

Week - 2

amazon.in

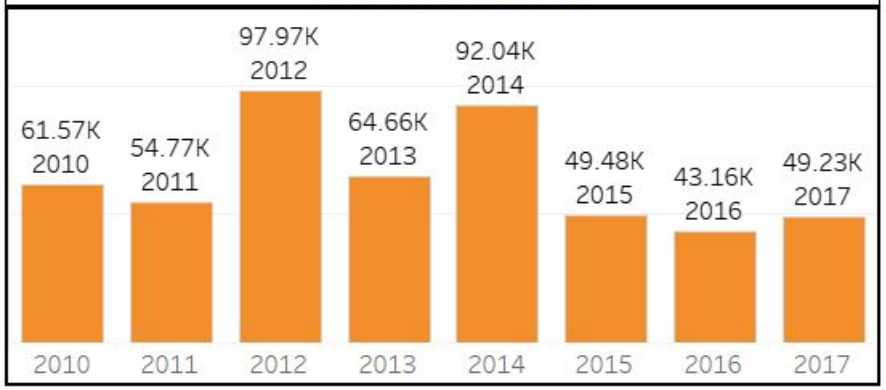
All | Search Amazon.in

Offline	Online
276.78K	236.09K

Cart

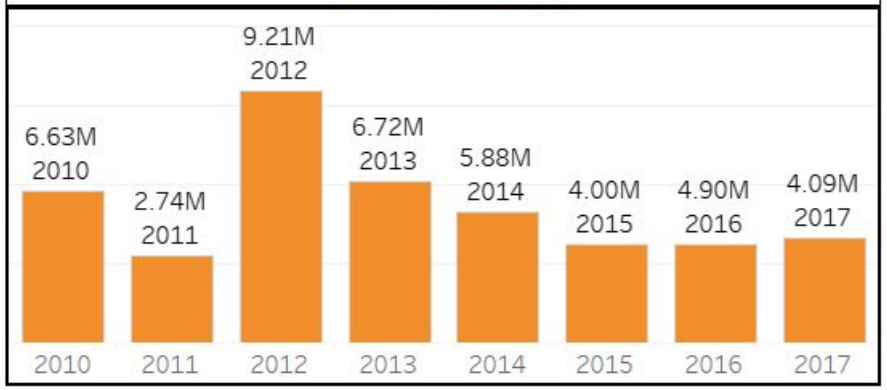
Total Units Sold

512.87K



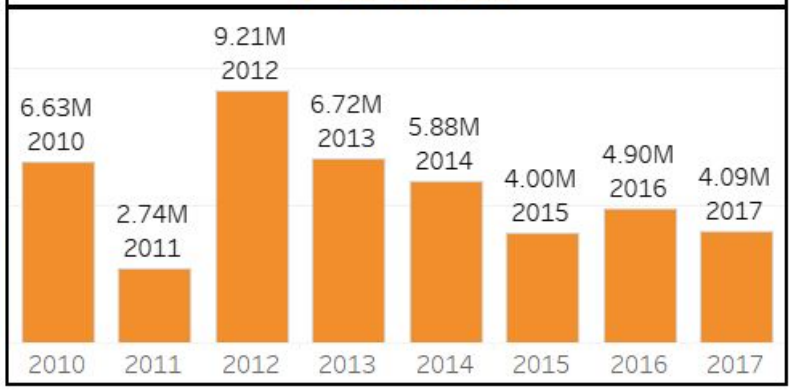
Total Revenue

137.35M

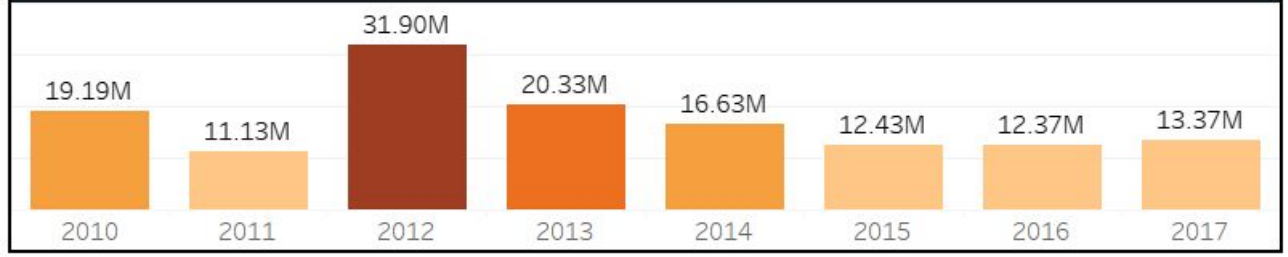


Total Profit

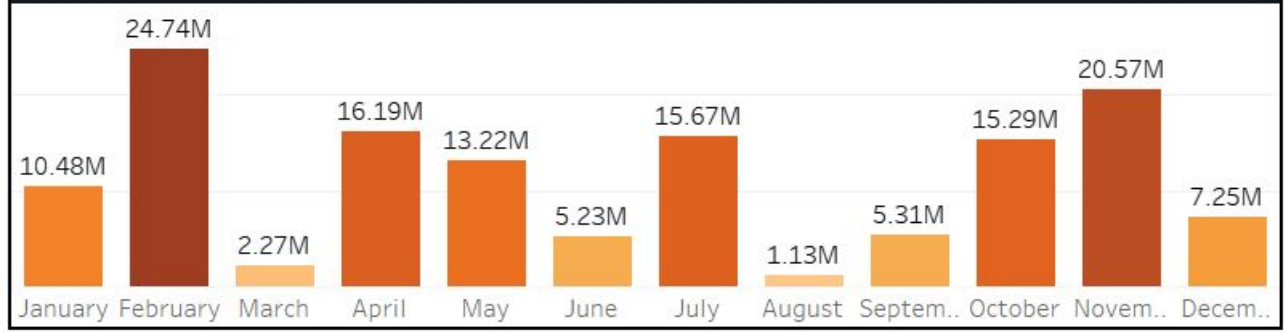
44.17M



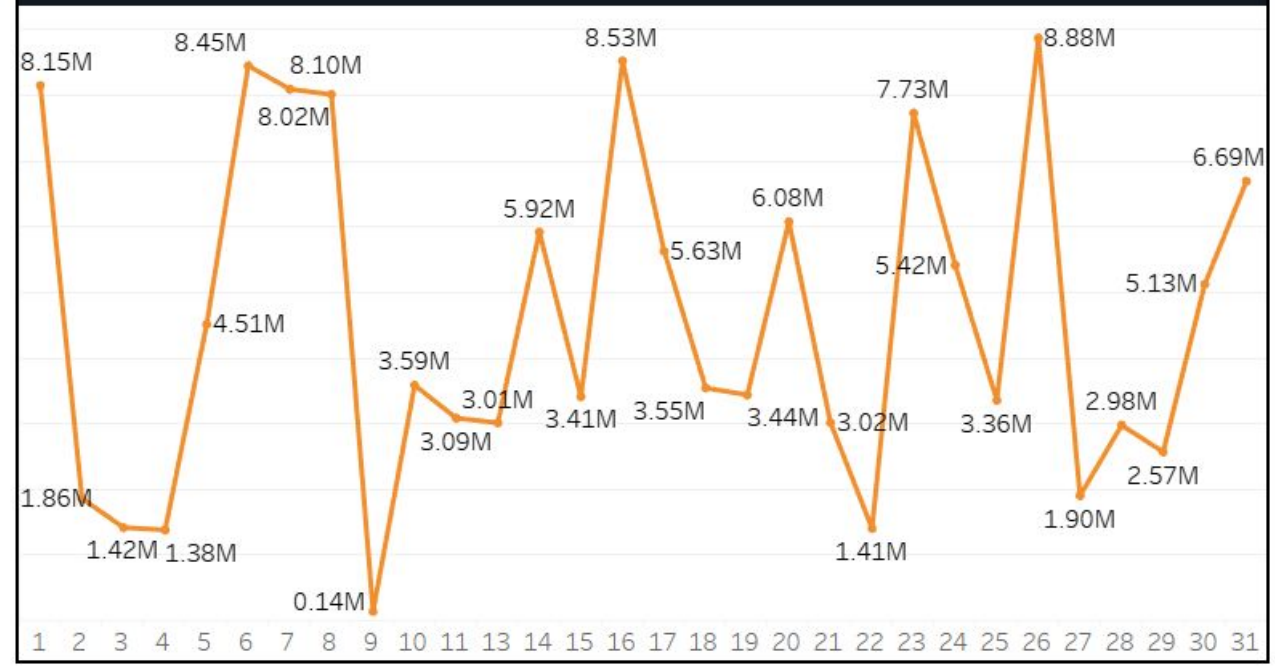
Total Revenue By Year



Total Revenue By Month



Total Revenue Over Time



amazon.in

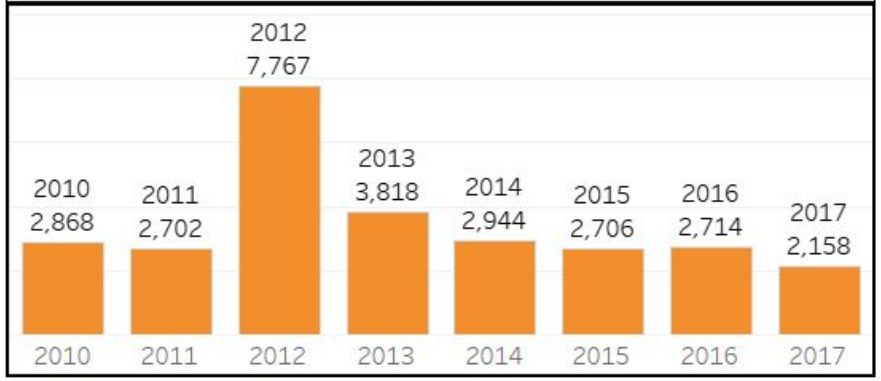
All | Search Amazon.in

Offline	Online
276.78K	236.09K

Home

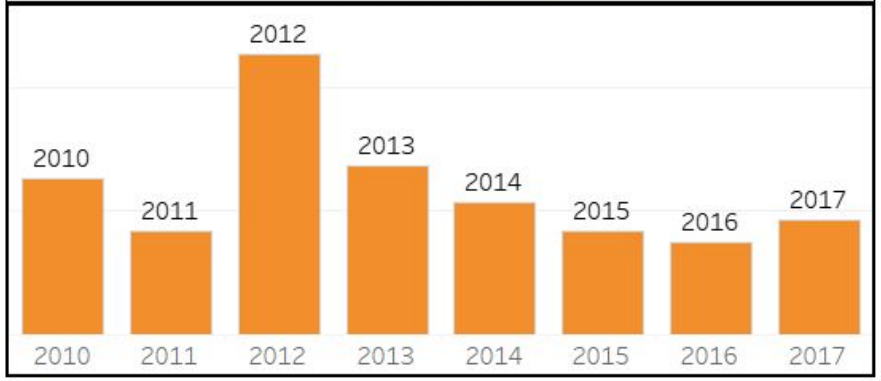
Unit Price

27.68K



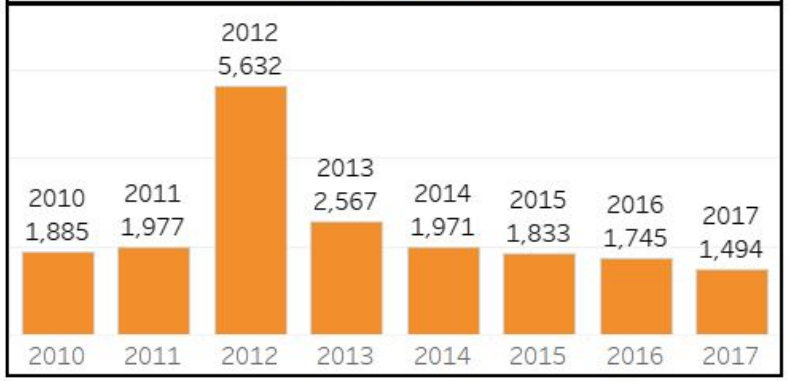
Total Cost

93.18M

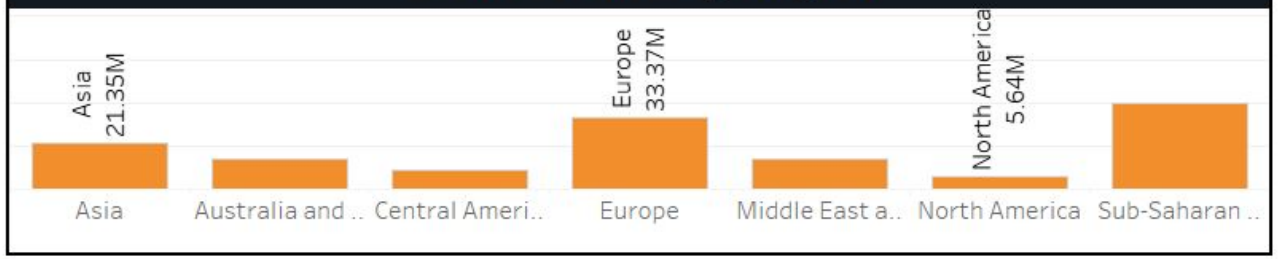


Unit Cost

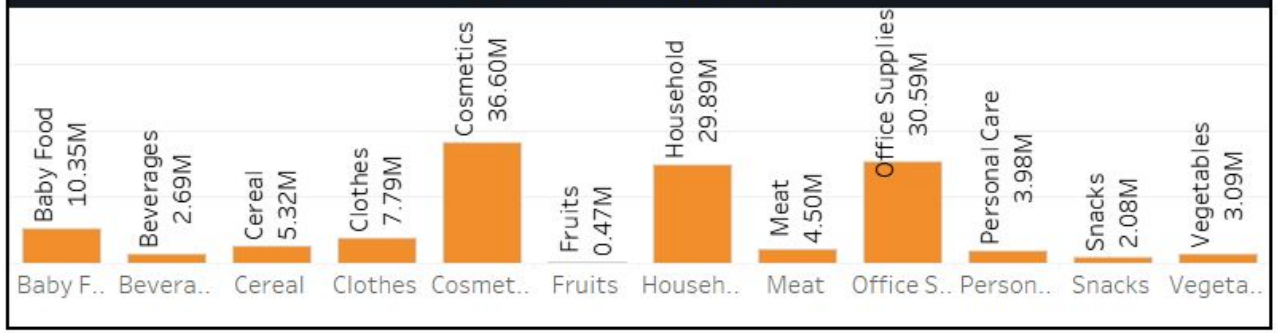
19.10K



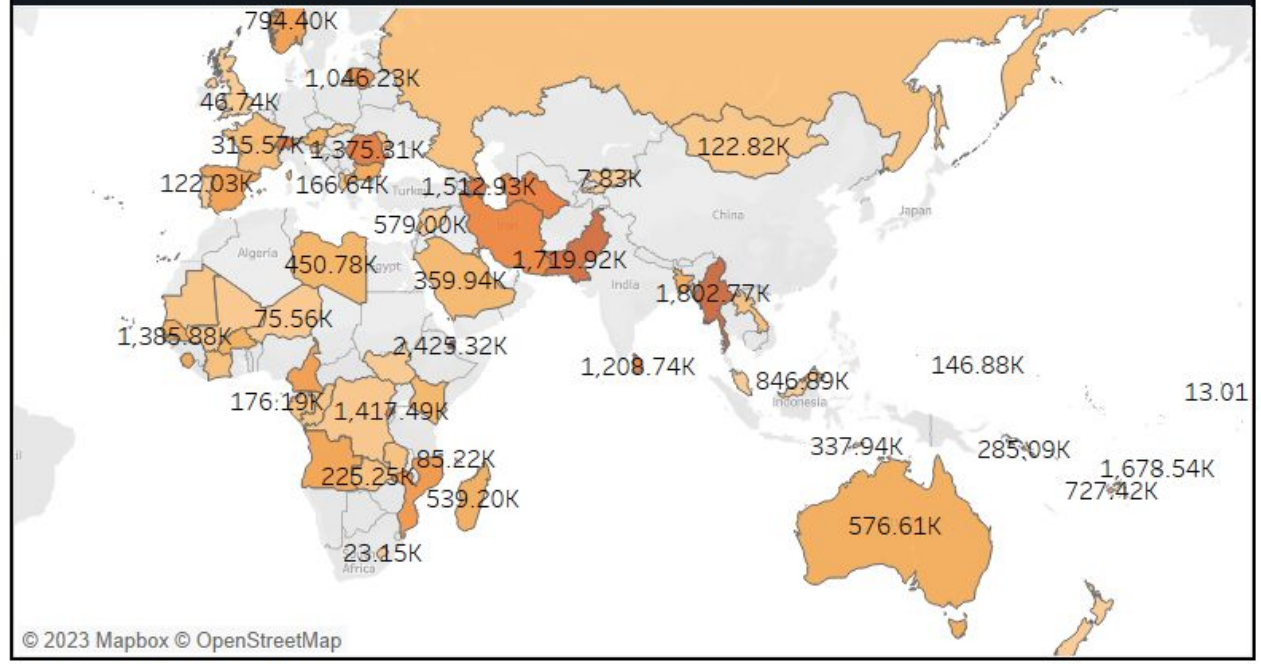
Total Revenue By Region



Revenue By Items



Total Profit By Country



Conclusion

we need to focus on 5 lowest profitable items to increase the profit for distribution and for reduce cost of the items we need to open more warehouses. These will help us to improve the method of distribution and also reduce cost.

Thank You

Python Notebook : Click Here

Tableau Dashboard : click Here

Foreign Direct Investment

By: Priyank Goswami

Week - 3

Project Title	Analyzing Amazon Sales Data
Technologies	Data Science
Domain	Finance
Project Difficulties Level	Intermediate

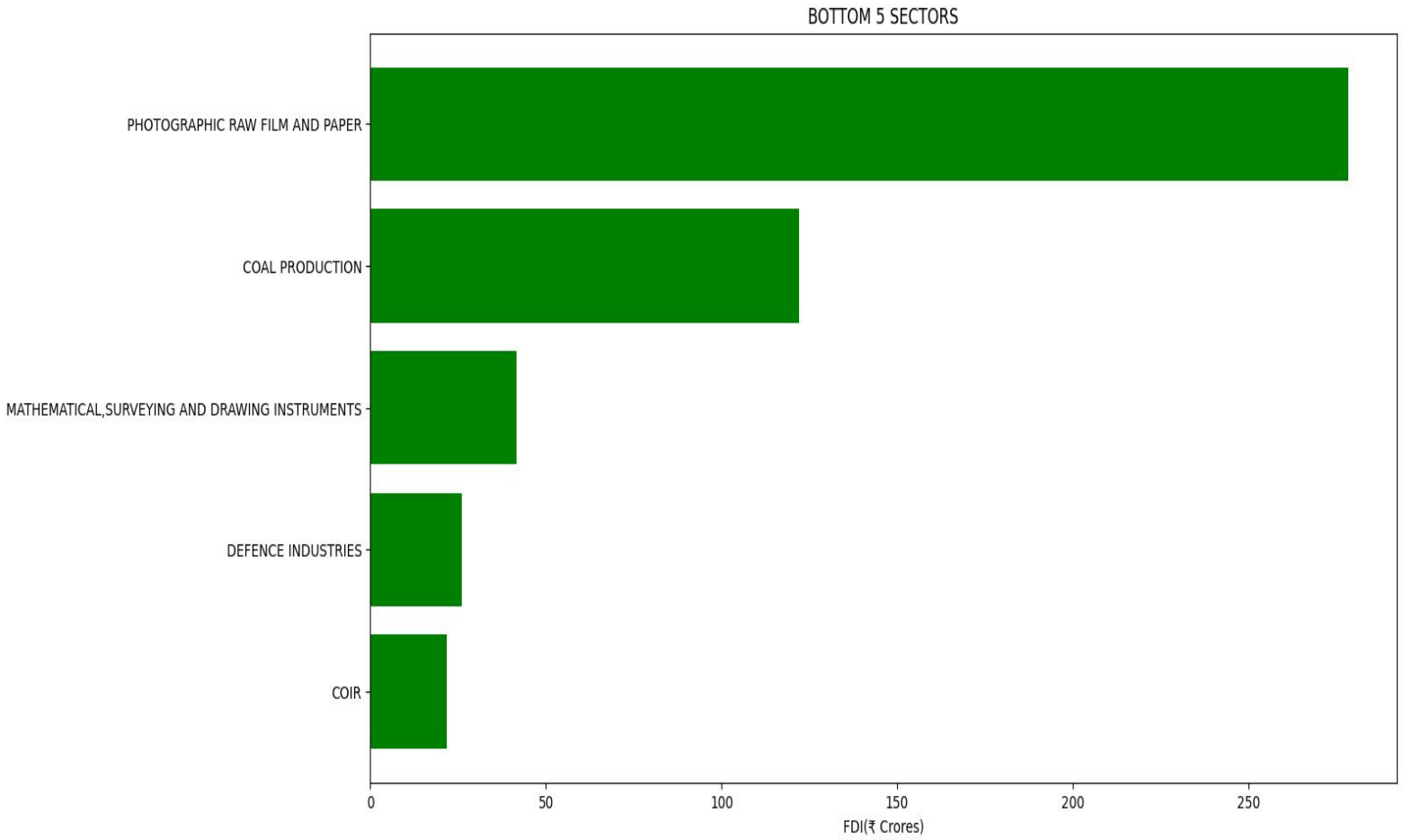
Dataset : Download Dataset

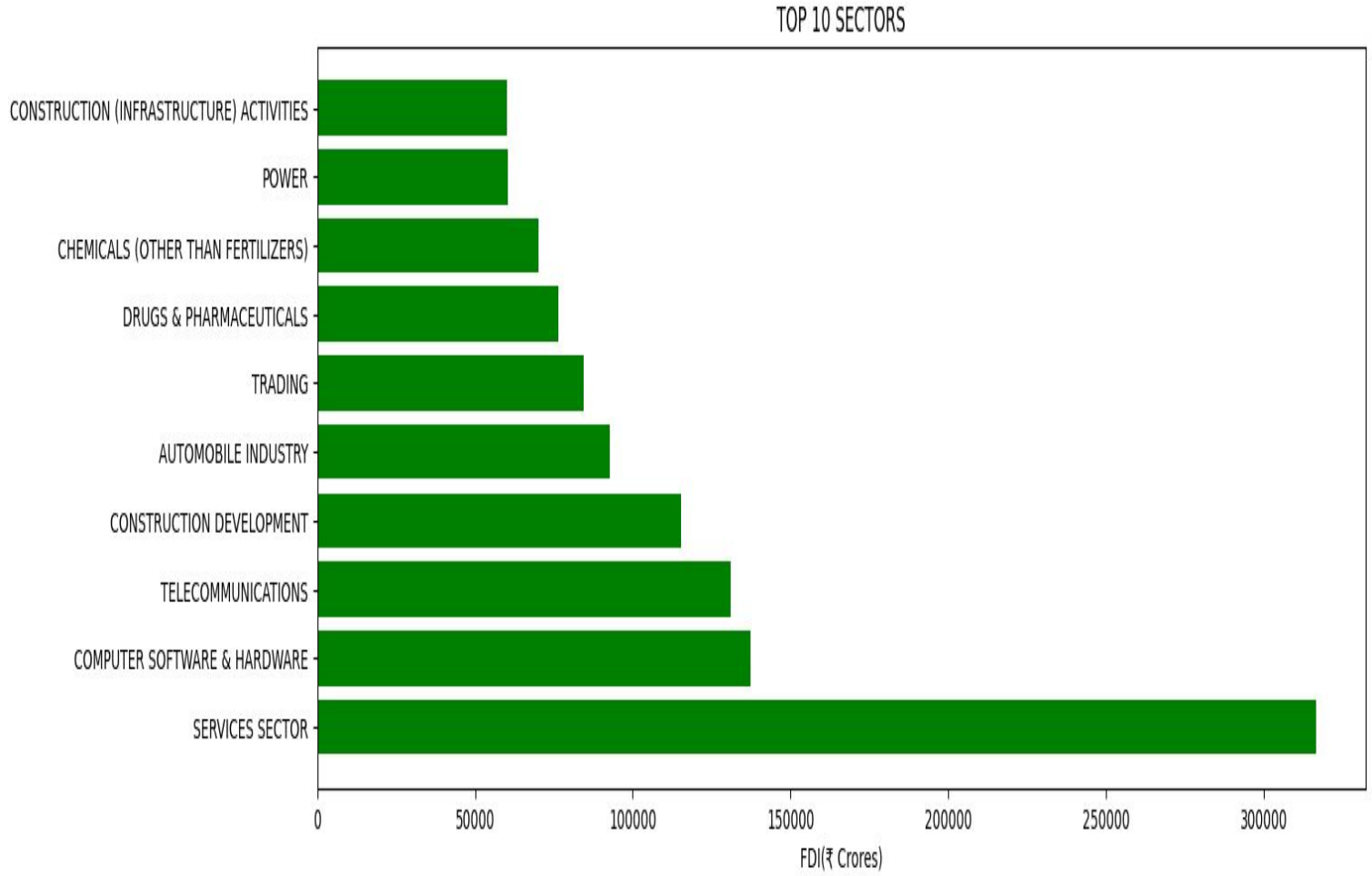
Problem Statement:

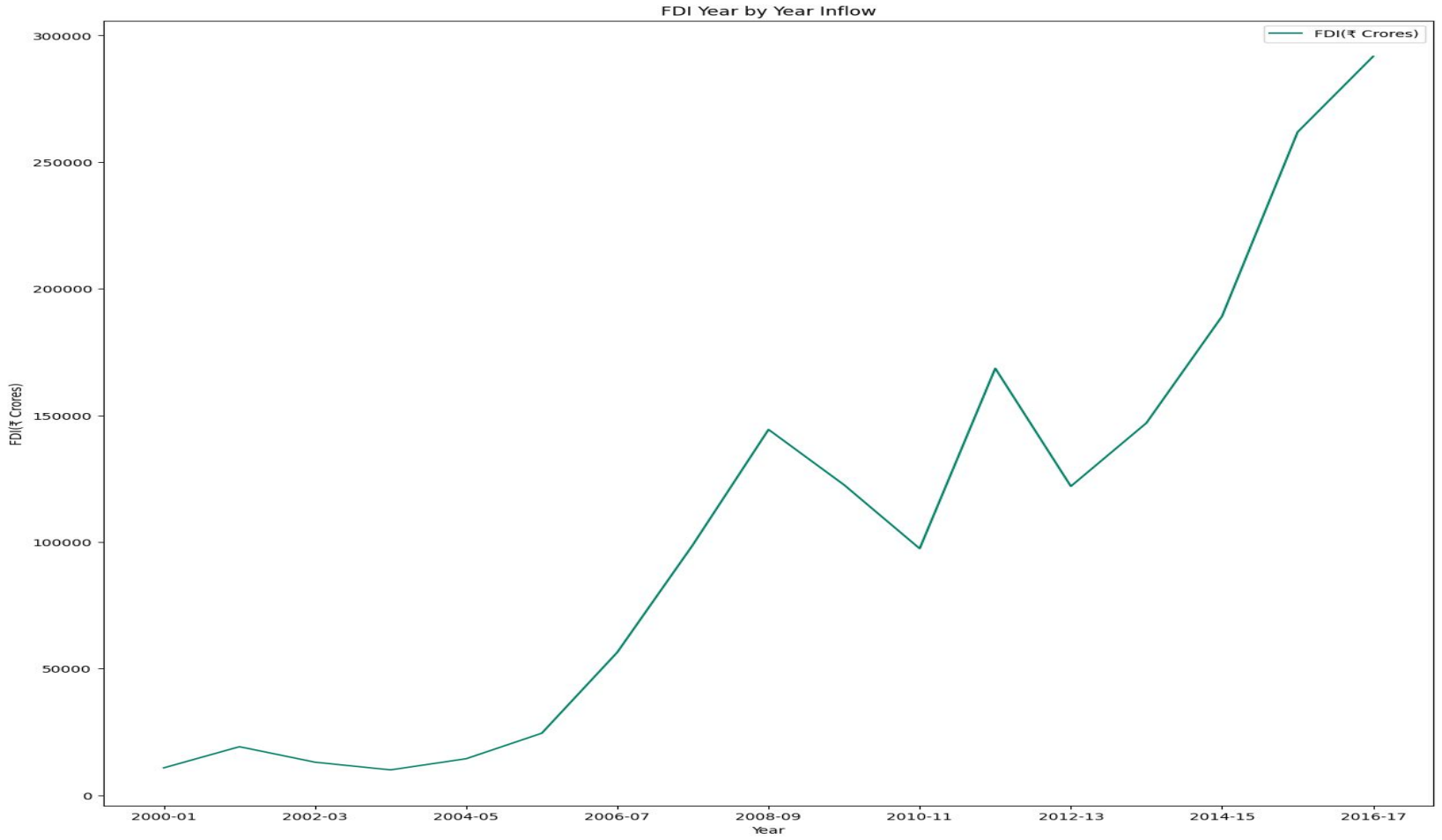
Investment is a game of understanding historic data of investment objects under different events but it is still a game of chances to minimize the risk we apply analytics to find the equilibrium investment.

To understand the Foreign direct investment in India for the last 17 years from 2000-01 to 2016-17. This dataset contains sector and financial year-wise data of FDI in India Sector-wise investment analysis Year-wise investment analysis.

Find key metrics and factors and show the meaningful relationships between attributes. Do your own research and come up with your findings


BOTTOM 5 SECTORS
PHOTOGRAPHIC RAW FILM AND PAPER
COAL PRODUCTION
MATHEMATICAL,SURVEYING AND DRAWING INSTRUMENTS
DEFENCE INDUSTRIES
COIR
0
50
100
150
200
250
FDI(₹ Crores)


TOP 10 SECTORS
CONSTRUCTION (INFRASTRUCTURE) ACTIVITIES
POWER
CHEMICALS (OTHER THAN FERTILIZERS)
DRUGS & PHARMACEUTICALS
TRADING
AUTOMOBILE INDUSTRY
CONSTRUCTION DEVELOPMENT
TELECOMMUNICATIONS
COMPUTER SOFTWARE & HARDWARE
SERVICES SECTOR
0
50000
100000
150000
200000
250000
300000
FDI(₹ Crores)


FDI Year by Year Inflow
FDI(₹ Crores)
300000
250000
200000
150000
100000
50000
0
FDI(₹ Crores)
2000-01
2002-03
2004-05
2006-07
2008-09
2010-11
2012-13
2014-15
2016-17
Year

Week - 4

FDI INDIA
Foreign Investment Facilitators

FDI Inflows: A Sectoral Analysis of Emerging and Developed Economies

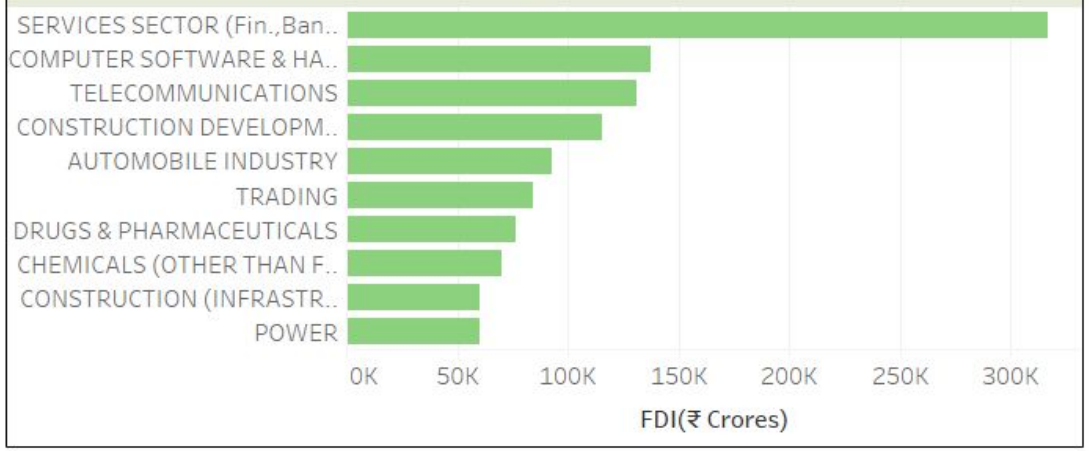
Amount in Crores ₹

₹1,792,348.29

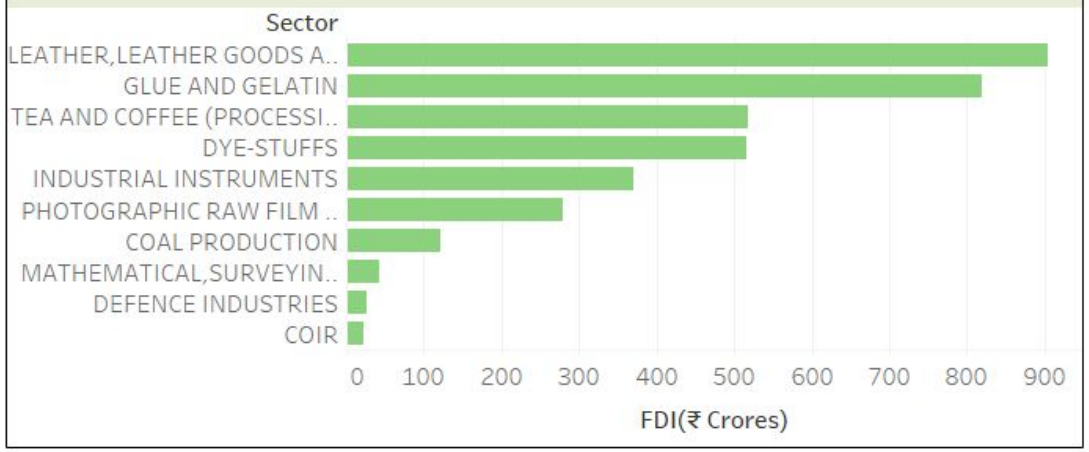
Amount in Millions $

$331,990.99

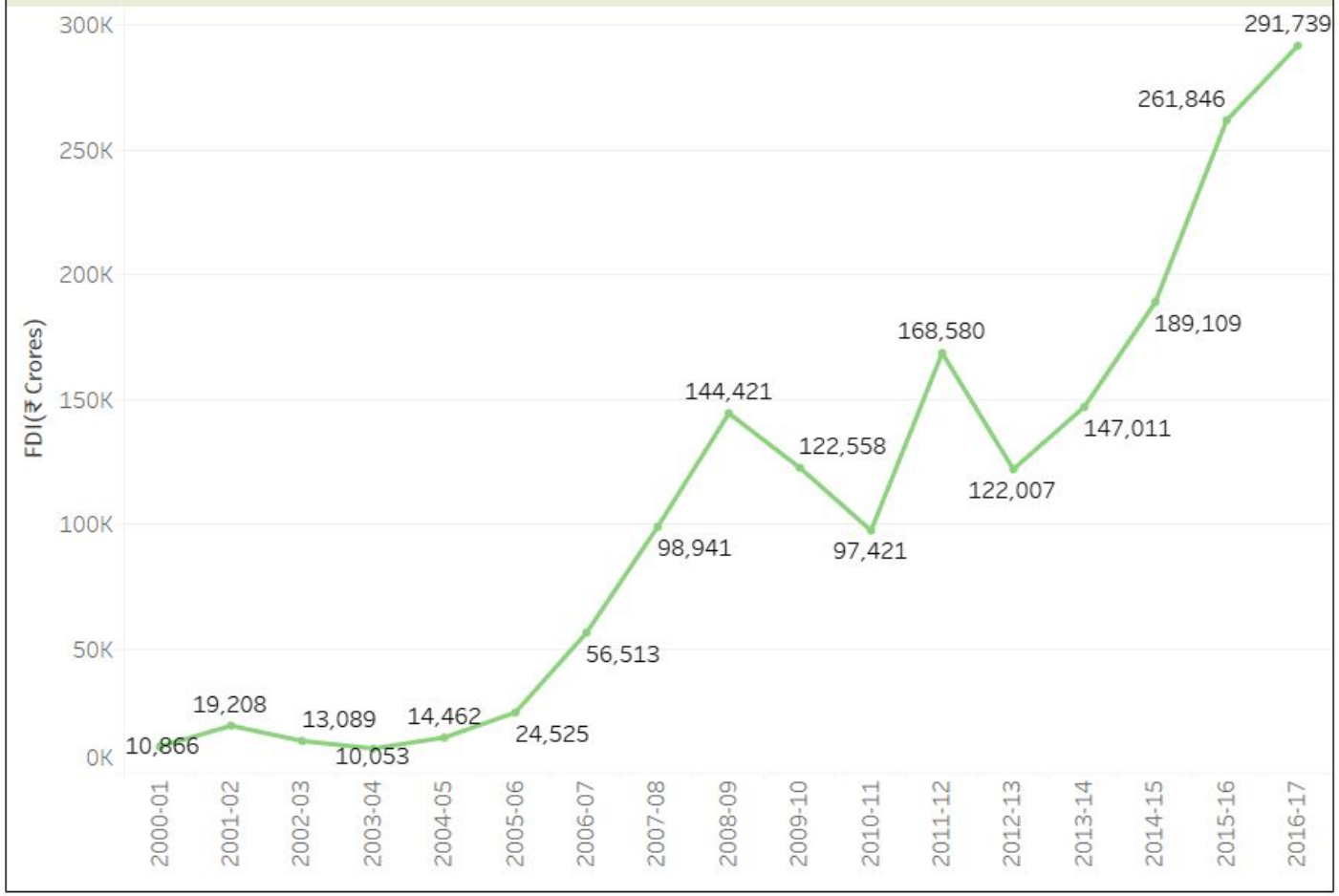
Sector Wise Highest FDI Inflows



Sector Wise Lowest FDI Inflows



Year wise FDI Inflows



Thank You

Python Notebook : Click Here

Tableau Dashboard : click Here