



INDIAN STARTUPS FUNDING ANALYSIS

Python Programming Lab

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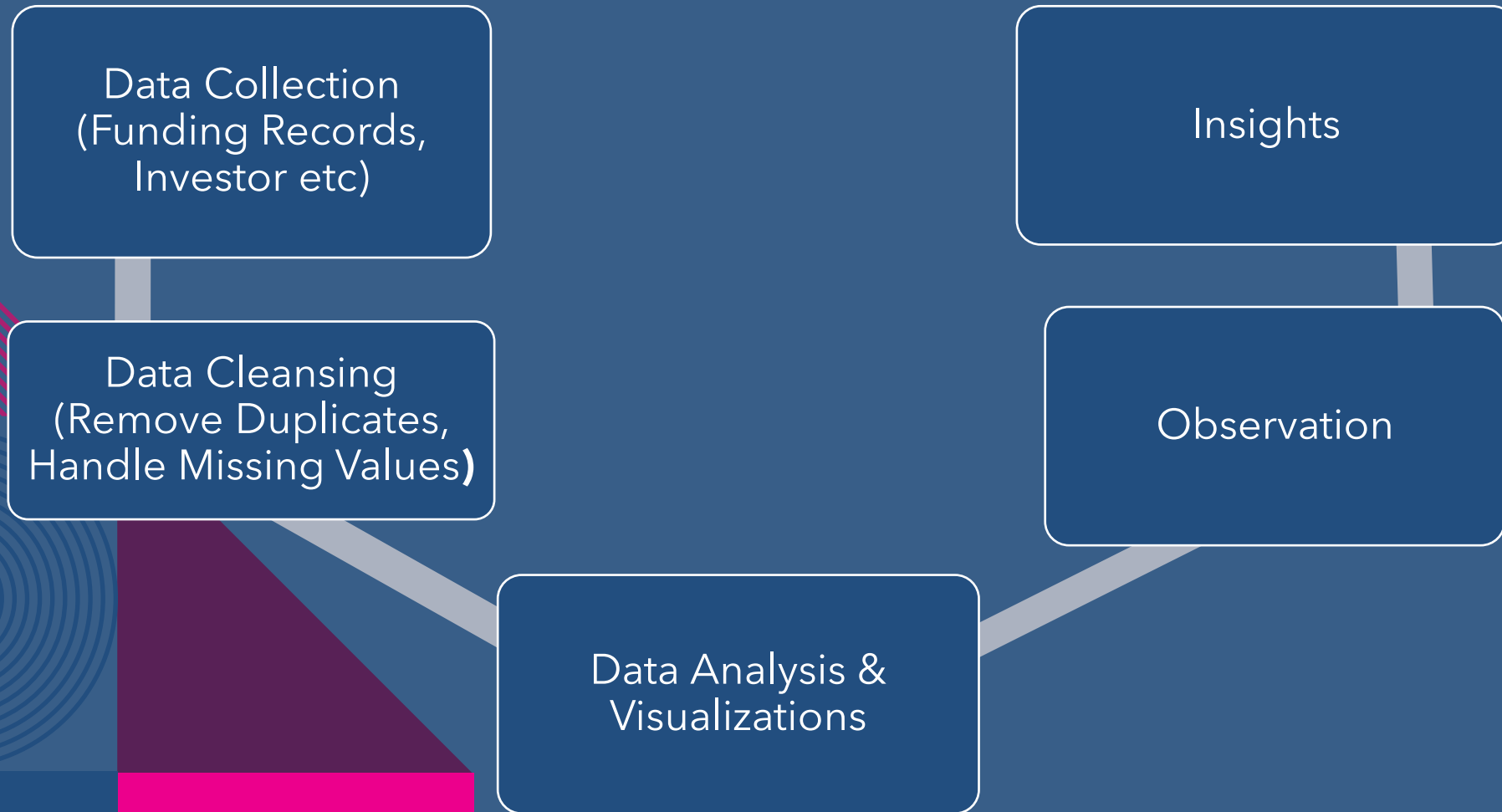
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MOTIVATION

- To explore factors driving startup growth in India.
- To analyze India's startup market to uncover investment trends and opportunities.
- Sectors, that attract investors most.

BLOCK DIAGRAM



PSEUDO CODE

1. Import required libraries
2. Read Data from the .csv file
3. Cleanse the data - remove the redundant, null values, replace the anonymous characters/words by appropriate values.
4. Plot the data in block chart.
5. Plot some data in py chart.

SNAPSHOTS OF CODE

Used Libraries:

```
# Import all the required libraries
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
from tabulate import tabulate
import warnings
warnings.filterwarnings("ignore")
```

```
def load_data(file_path):
    #Datafile is loaded
    df = pd.read_csv(file_path)
    return df
```

← Pandas library is used.

SNAPSHOTS OF CODE(CONTINUED)

Data Cleansing:

```
def clean_data(df):  
    #Data cleansing  
    df['amount']=df['amount'].fillna('0')  
    df['amount']=df['amount'].str.replace(',','')  
    df['amount']=df['amount'].str.replace('undisclosed','0')  
    df['amount']=df['amount'].str.replace('unknown','0')  
    df['amount']=df['amount'].str.replace('Undisclosed','0')  
    df=df[df['amount'].str.isdigit()]  
    df['amount']=df['amount'].astype('float64')  
    df['vertical']=df['vertical'].str.replace('Health and wellness','healthcare')  
    df['vertical']=df['vertical'].str.replace('Health and Wellness','healthcare')  
    df['vertical']=df['vertical'].str.replace('Healthcare','healthcare')  
    df['vertical']=df['vertical'].str.replace('Health Care','healthcare')  
    return df
```

SNAPSHOTS OF CODE(CONTINUED)

```
def plot_top_10_funding(top_10_df):  
    #Amount Raised by Top 10 Startups  
    #Matplot librery is used  
    plt.figure(figsize=(10, 6))  
    plt.bar(top_10_df['startups'], top_10_df['amount'], color='skyblue')  
    plt.title('Amount Raised by Top 10 Startups', fontsize=16, color='blue')  
    plt.xlabel('Startups', fontsize=14)  
    plt.ylabel('Amount Raised ($)', fontsize=14)  
    plt.xticks(rotation=45, ha='right')  
    plt.tight_layout()  
    plt.show()
```

Matplotlib library is used

SNAPSHOTS OF CODE(CONTINUED)

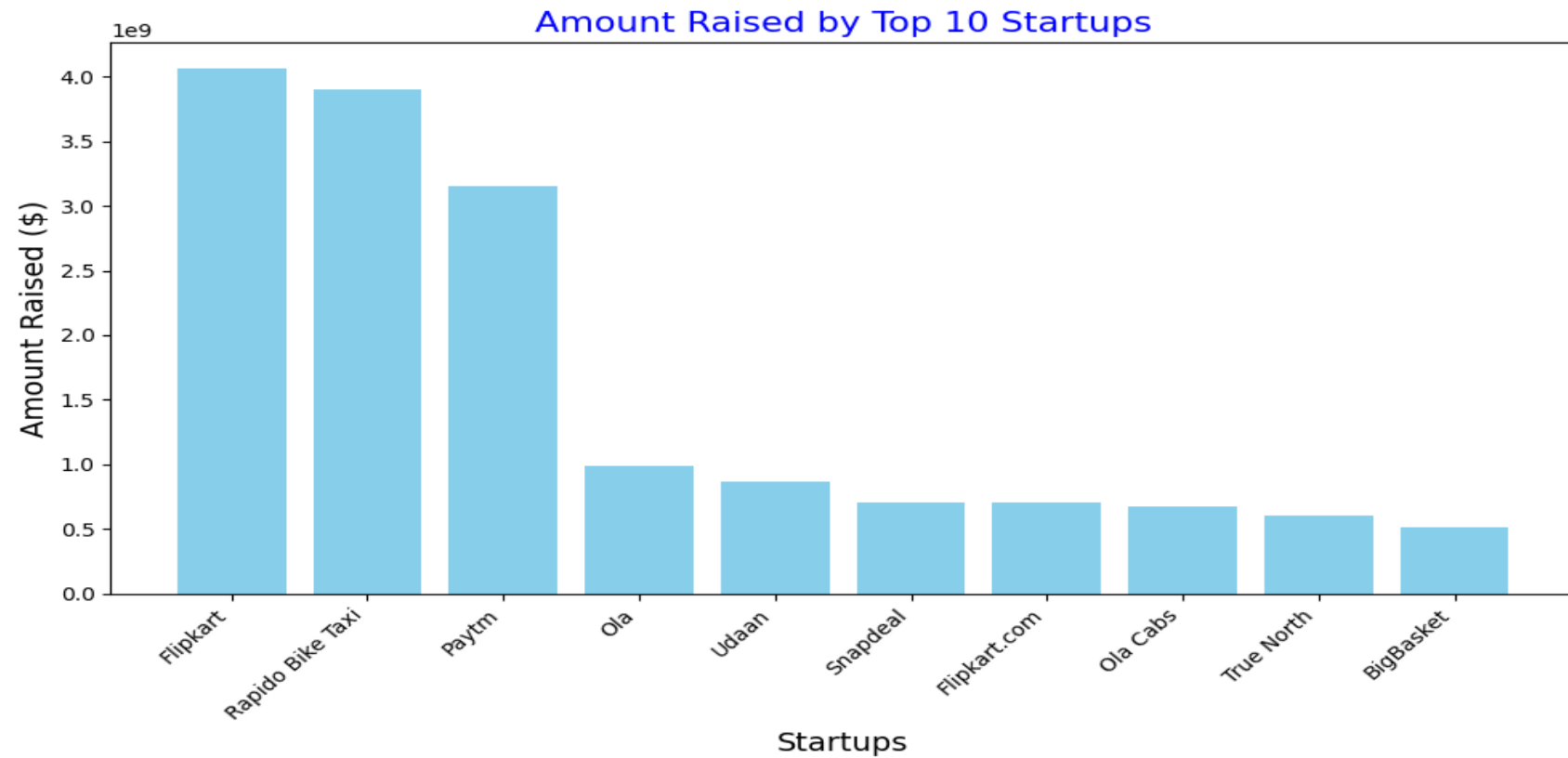
```
def plot_healthcare_marketcap(df):  
    #Py chart of healthcare market  
    Helthcare=df[df['vertical'] == 'healthcare'][['startups','amount']]  
    Helthcare =Helthcare[Helthcare['amount'] > 0]  
    Top10_Helthcare_company=Helthcare.sort_values(by='amount',ascending=False).head(10)  
    plt.figure(figsize=(10,10))  
    plt.pie(Top10_Helthcare_company['amount'], labels=Top10_Helthcare_company['startups'], autopct='%1.1f%%', startangle=90,  
            colors=sns.color_palette('pastel'),shadow=True, wedgeprops={'edgecolor': 'black'})  
    plt.title('Healthcare marketcap acquisition by startups', fontsize=18, weight='bold')  
    plt.show()
```

Seaborn library is
used

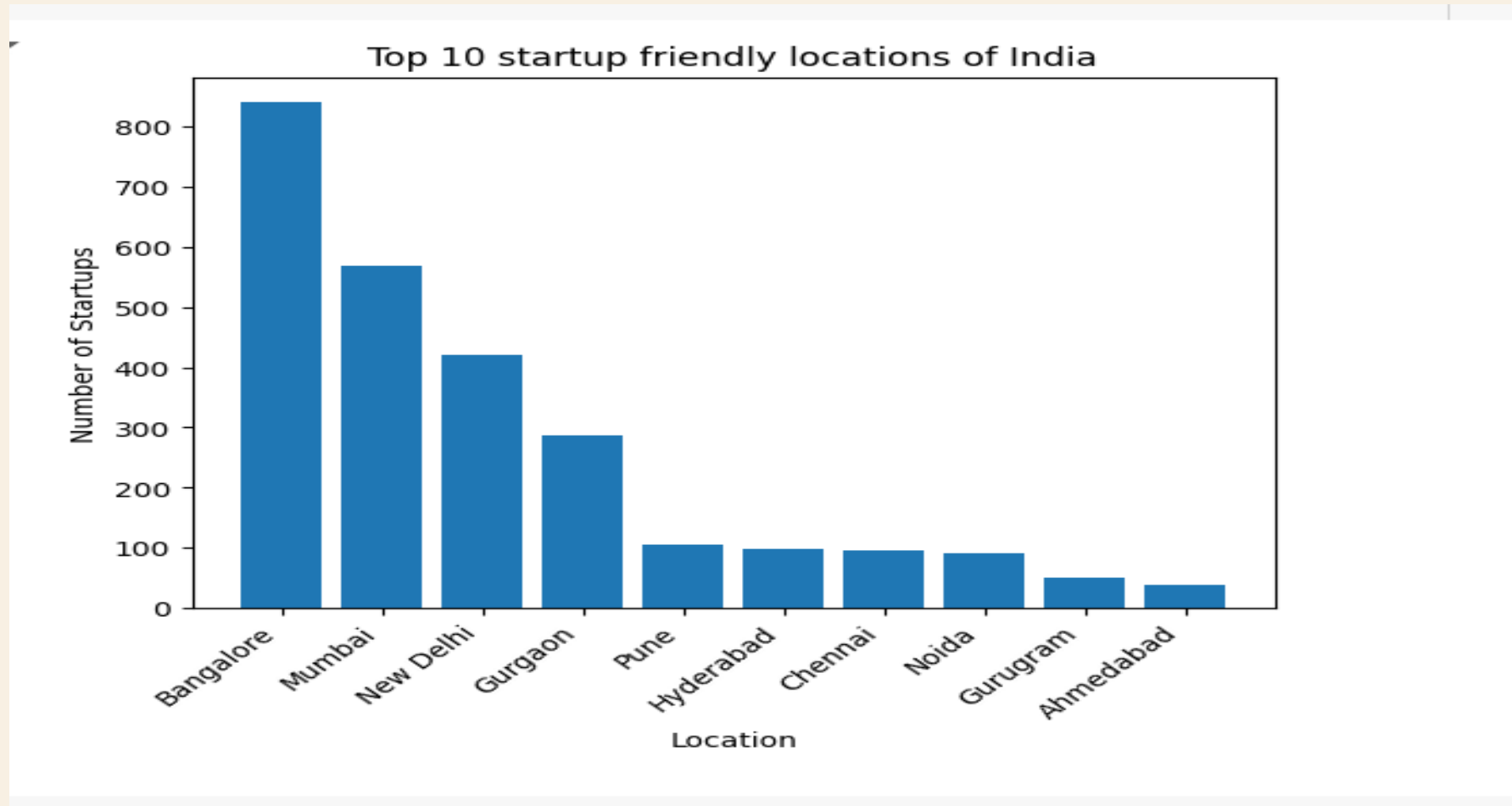
```
def top_10_funding(df):  
    #Top 10 highest fund raising startups  
    funding_overview = df.groupby('startups')['amount'].sum().sort_values(ascending=False).head(10)  
    top_10_df = funding_overview.reset_index()  
    print(tabulate(top_10_df, headers='keys', tablefmt='pretty'))  
    return top_10_df
```

Tabulate library is
used

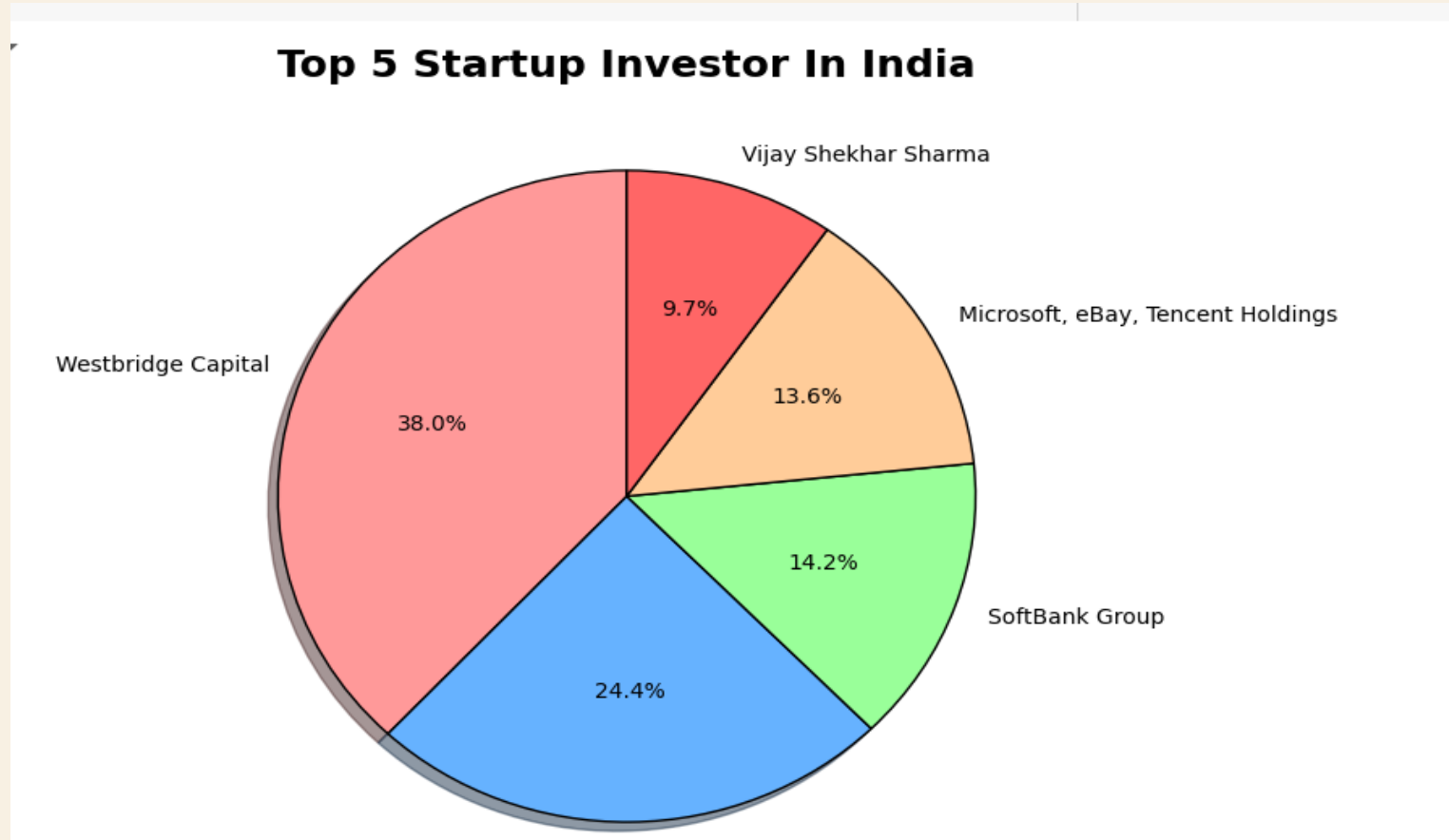
RESULT:



RESULT(CONTINUED):

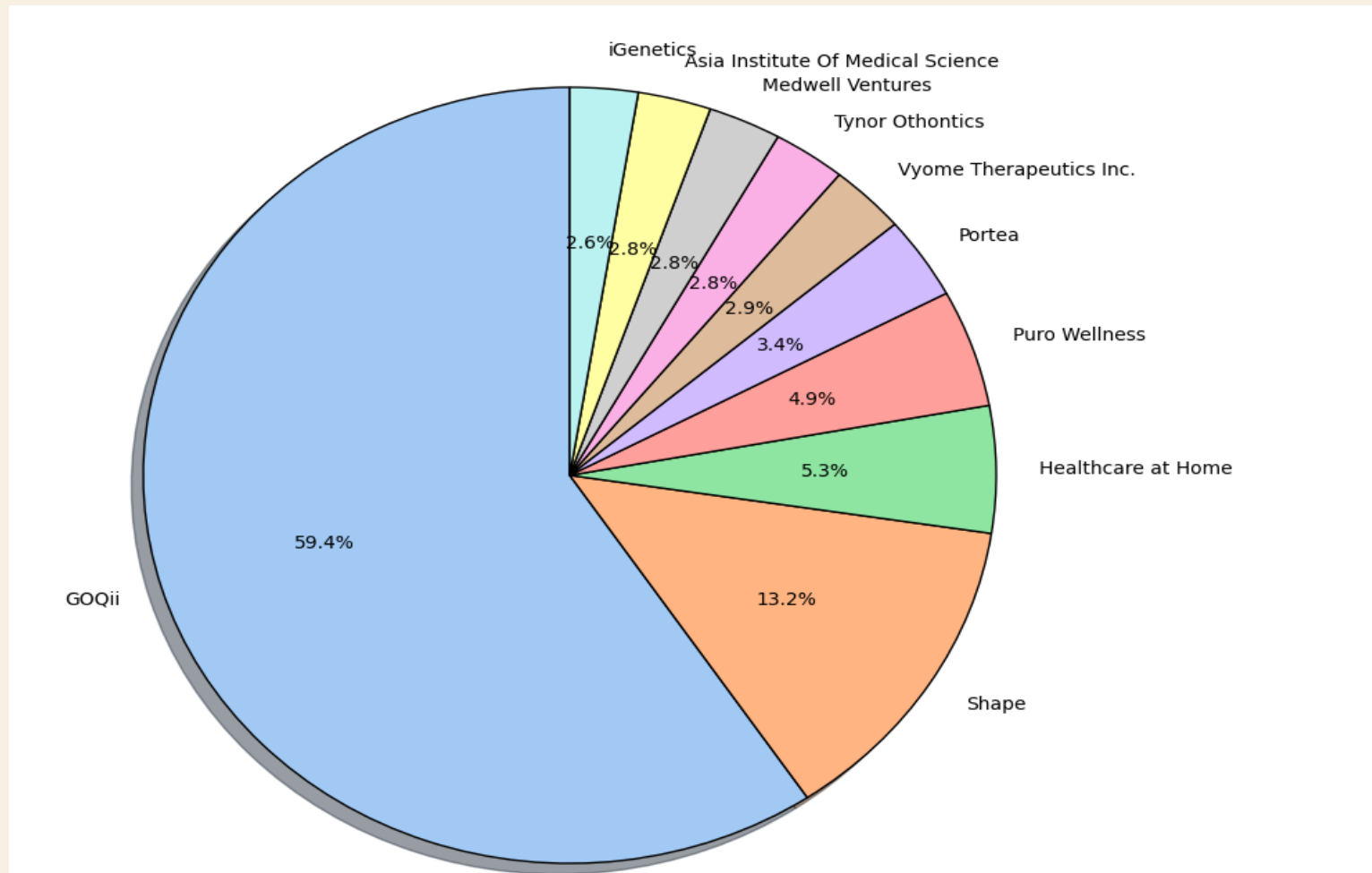


RESULT (CONTINUED):



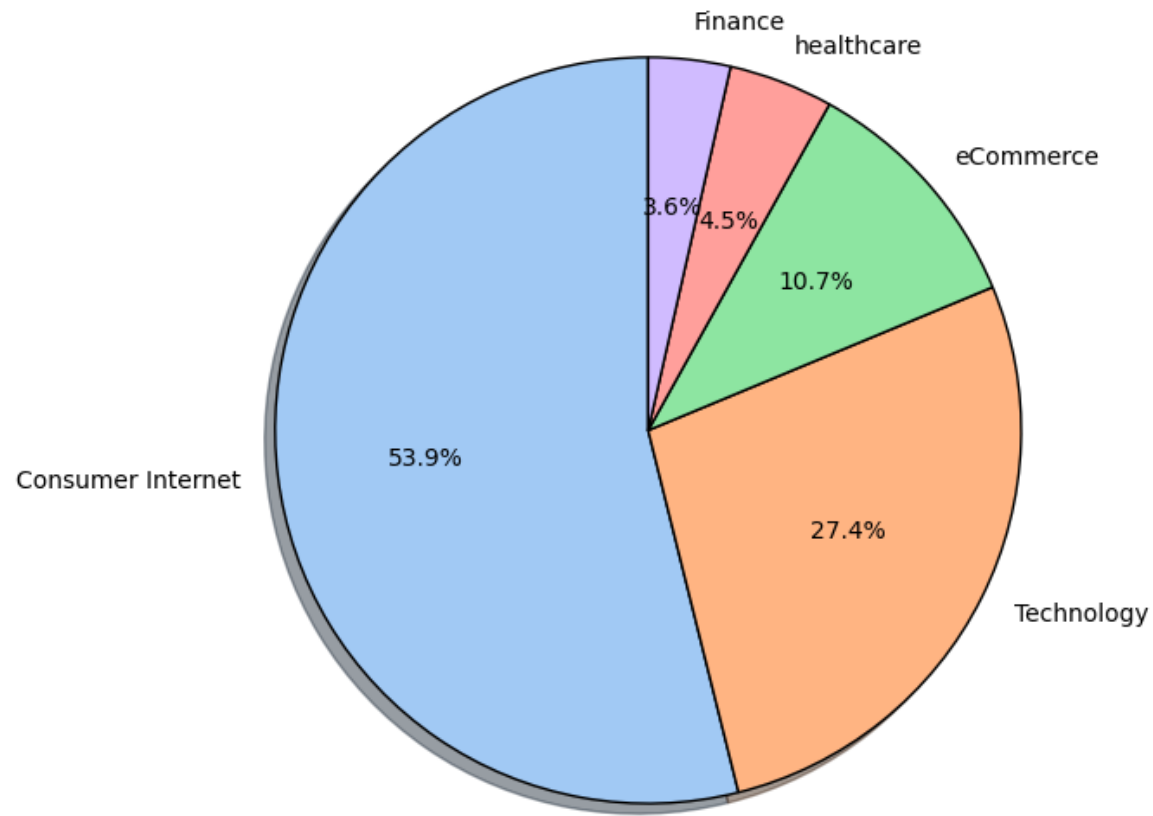
RESULT (CONTINUED):

Healthcare marketcap acquisition by startups



RESULT (CONTINUED):

Top 5 interesting market Investor Like to Invest



OBSERVATIONS:

- Technology-driven sectors, especially fintech, e-commerce, and edtech, receive a significant share of funding.
- Major startup hubs like Bengaluru, Mumbai, and Delhi-NCR lead in funding activity, driven by a concentration of talent, infrastructure, and investor presence.
- Indian startups see a mix of domestic and international investors.

LEARNINGS:

- The use of libraries like Numpy, Pandas, Matplotlib, time
- File handling, Image handle



THANK YOU