# INVESTMENT ASSIGNMENT

SUBMISSION

Name: M.PHANEESHWAR

Spark Funds- Investment Analysis

- Spark Funds an assert management company looking for Investment in Companies which are present in english speaking countries

- **Business Objectives**:

- It wants to invest between 5 to 15 million USD per round of investments

- It wants to invest in one of the best english speaking countries with a suitable investment type and sectors

- **Business Solutions**:

- Investment type analysis, Country Analysis, Sector Analysis, Company Analysis from the given Data

FLOW CHART
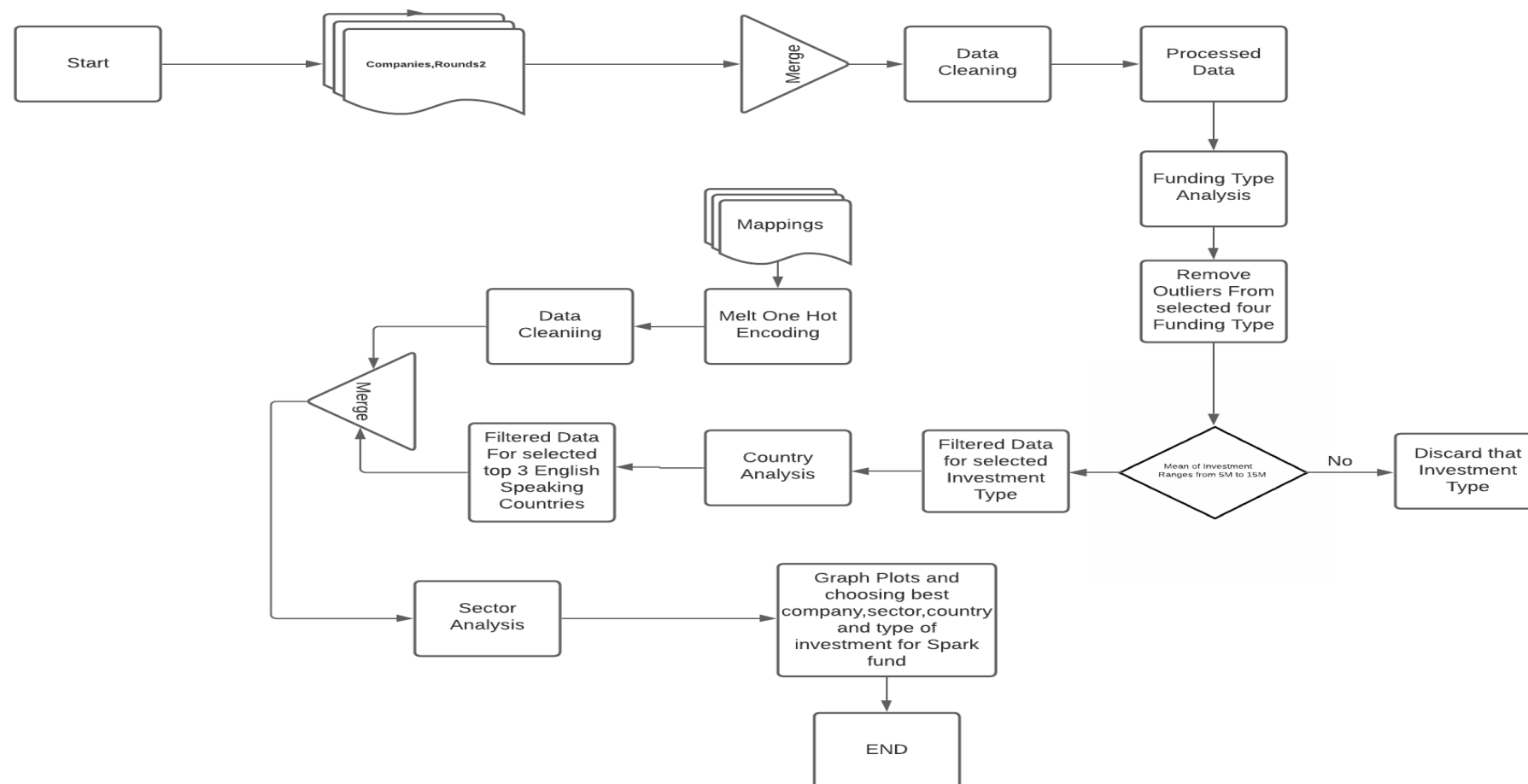
Data Cleaning

Initial Analysis:

- Analyse the number of nulls in every columns for a given dataset

- Delete Unnecessary Columns which are not helpful for the analysis

- Delete nulls if it cannot be replaced

- Correcting incorrect or missing data wherever required for the analysis

- Consider Companies that are not closed

Output Analysis:

- Size of Master Frame is (83277,11)

Funding Type Analysis

Investment Analysis:

- Four Investment types were considered for the analysis they are Venture, Seed, Angle, Private Equity

- Outliers from Raised amount are removed as its dependent factor is respective investment type and by doing this it brings out better analysis
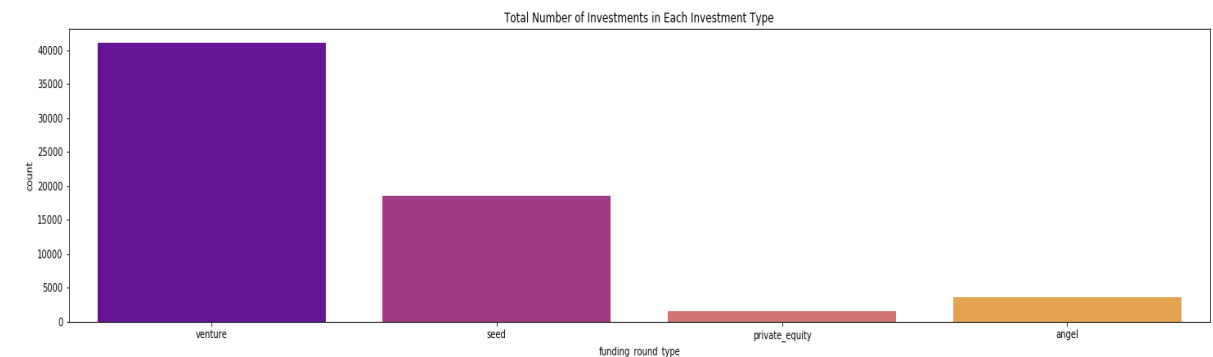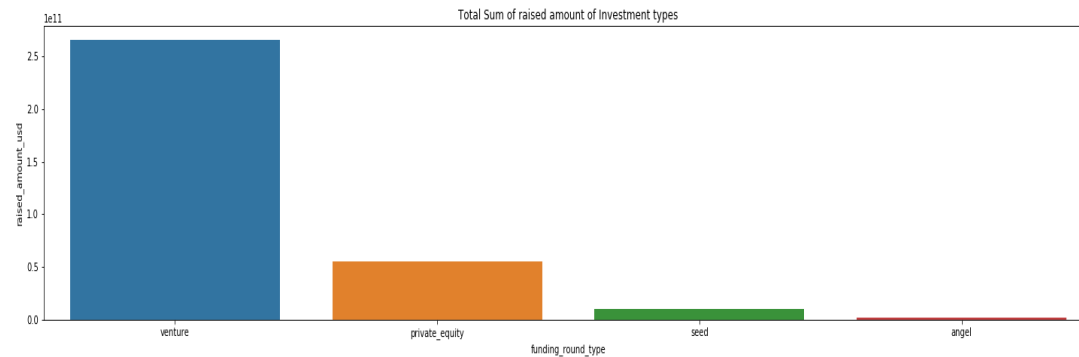
Output Analysis:

From the output graph plots it is observed that Venture is best

suitable investment type and the mean of the total amount under venture

Type lies between 5M to 15M USD
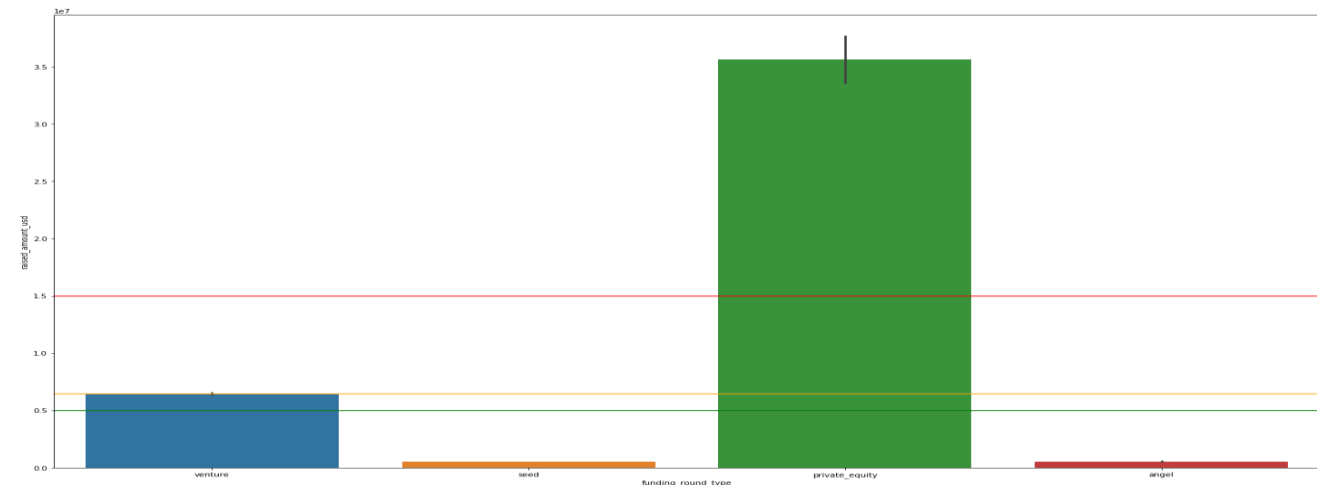
Country Analysis

Top 9 Countries Analysis:

- Choosing the best countries by considering the total amount and total number of investments as major factor for venture investment type

- From the analysis plot it is been observed that USA has a better investments with the total investment amount of **2.018002e+11**,when compared to other countries. When we consider the average investment, China stands first, but number of investors are very high for USA and preferred the same considering various factors. As Spark Funds want to invest in English speaking countries hence China is not considered for further analysis.

Output Analysis:

- Hence the top 3 English speaking countries are preferred accordingly from the below plots, and they are USA, GBR, and CAN, as these 3 countries have better results. Even though IND have better avg when compared to CAN but the Total number of investments and the total amount of investments are higher compared to IND hence CAN is preferred over IND
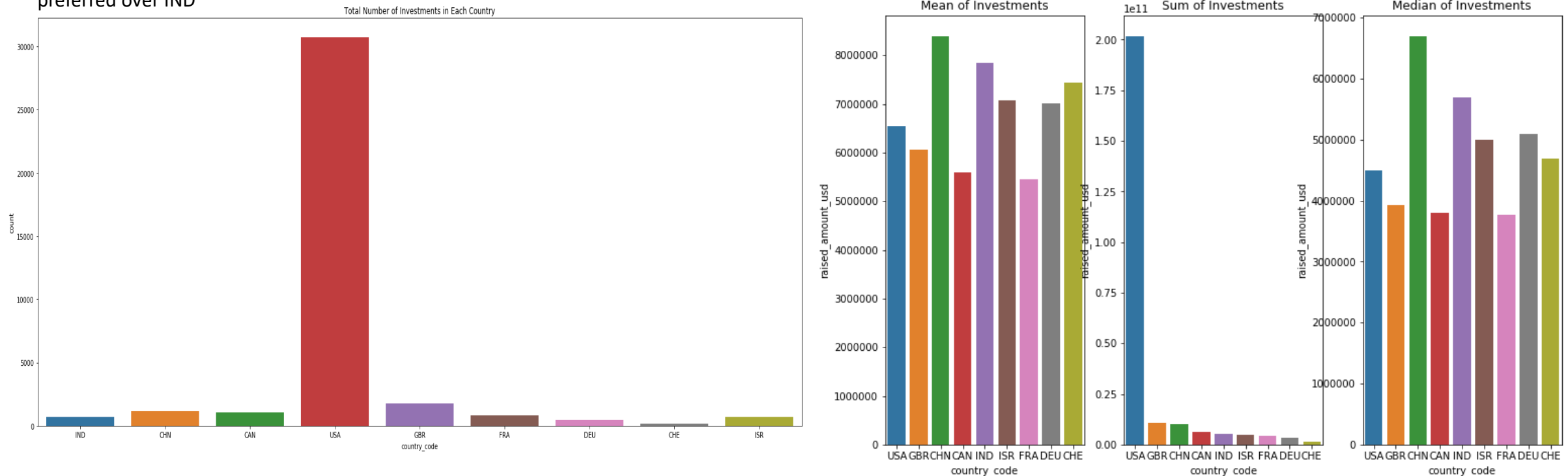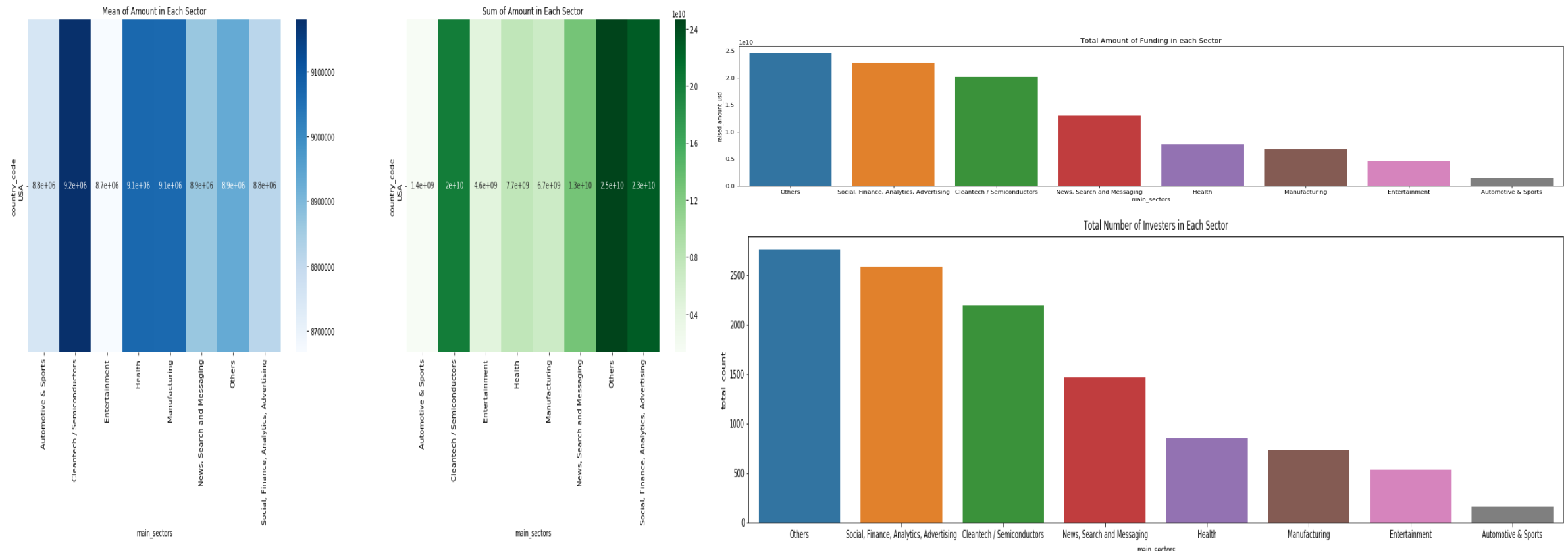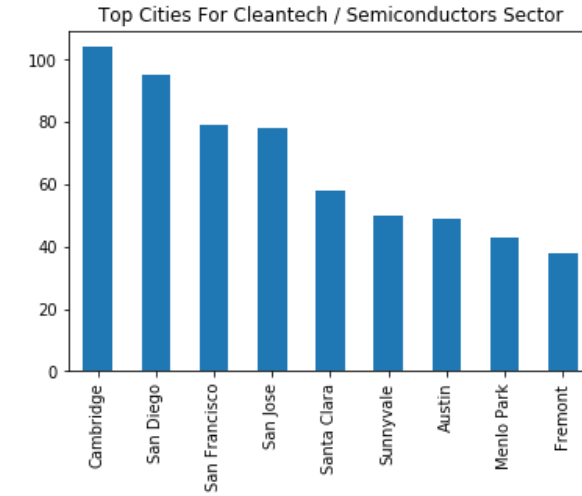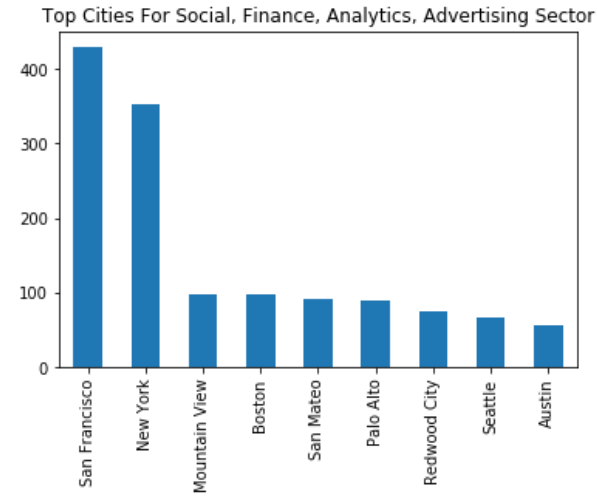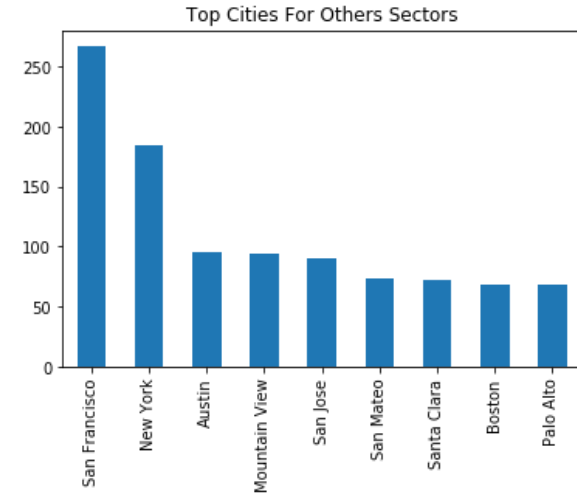
Sector Analysis

Sector Analysis for top 3 countries (USA,GBR,CAN)

- Considering top 3 Countries, top sectors from each country are determined based on the total number of investments and total amount of money invested
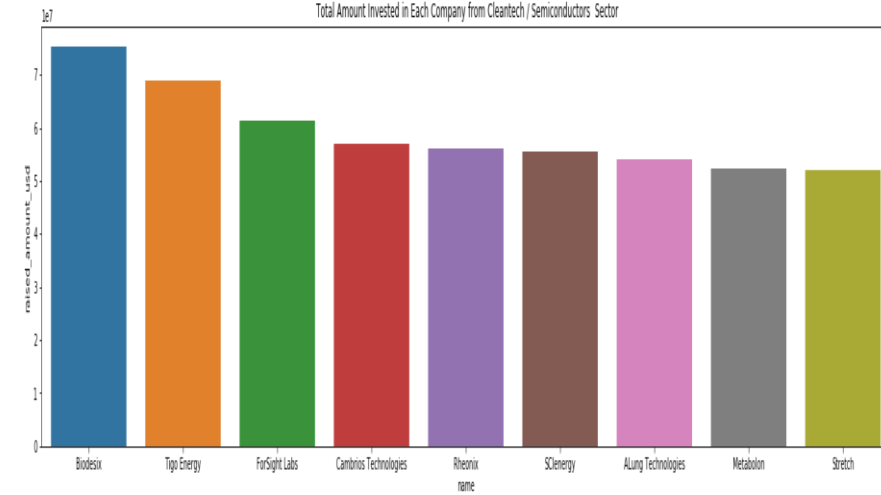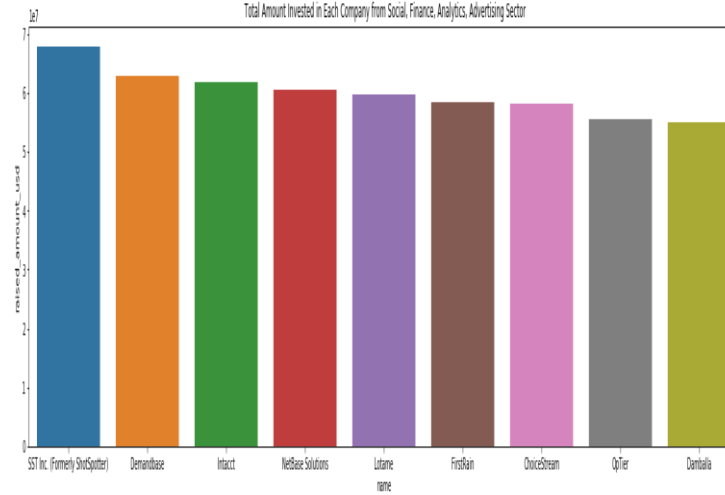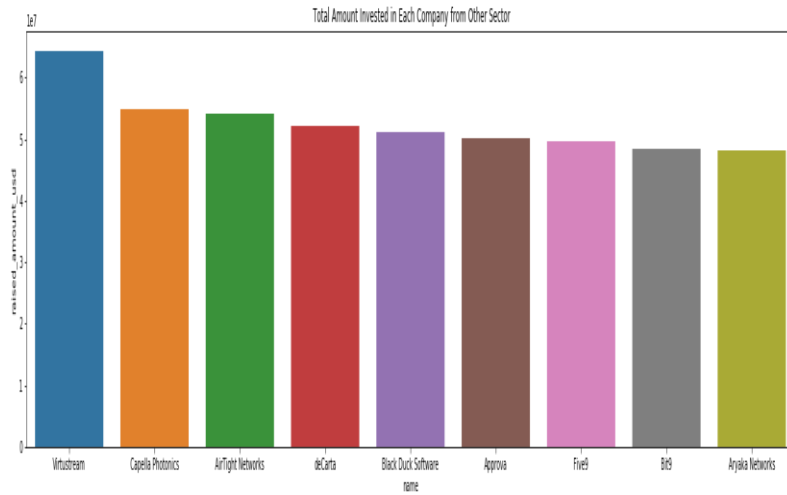
a) **1) Top Sectors in USA :** From the below plots it is observed that, the top3 sectors of USA are (1) Others (2) Social, Finance, Analytics, Advertising (3) Cleantech / Semiconductors
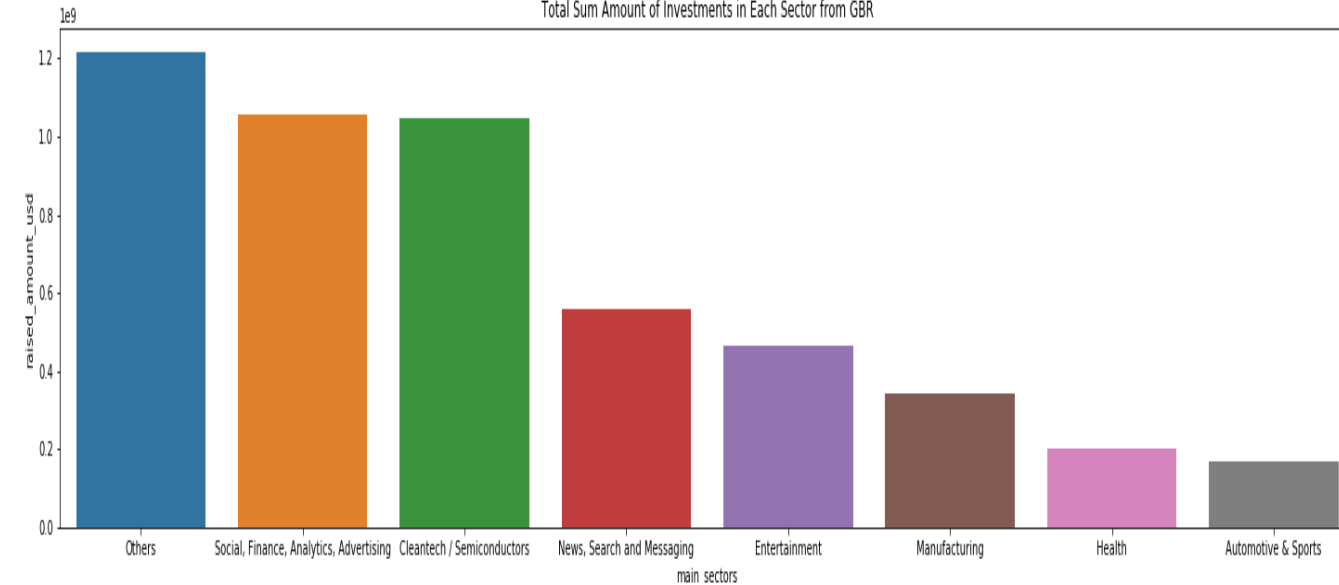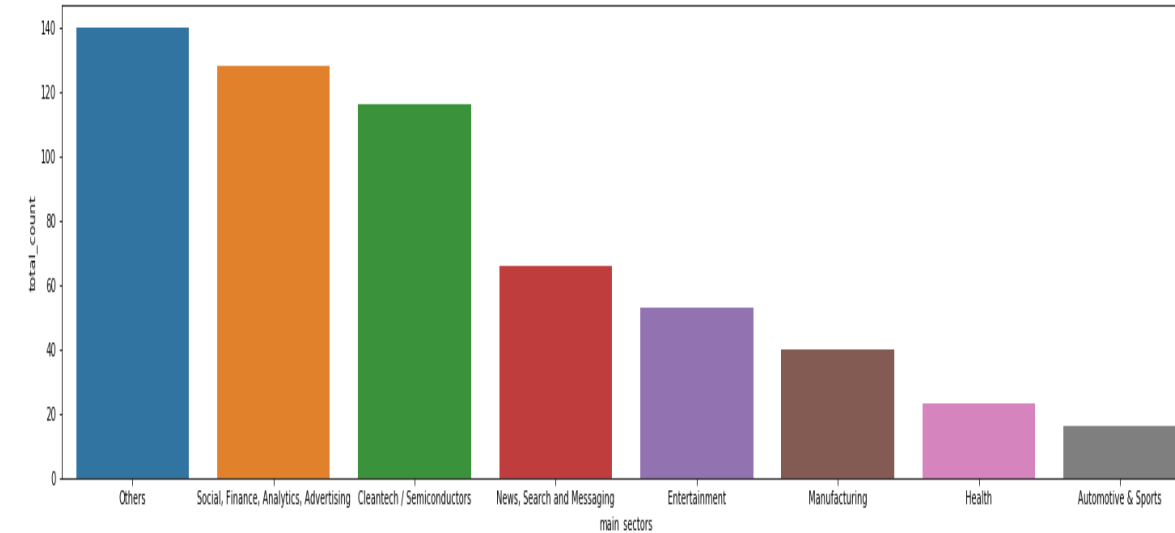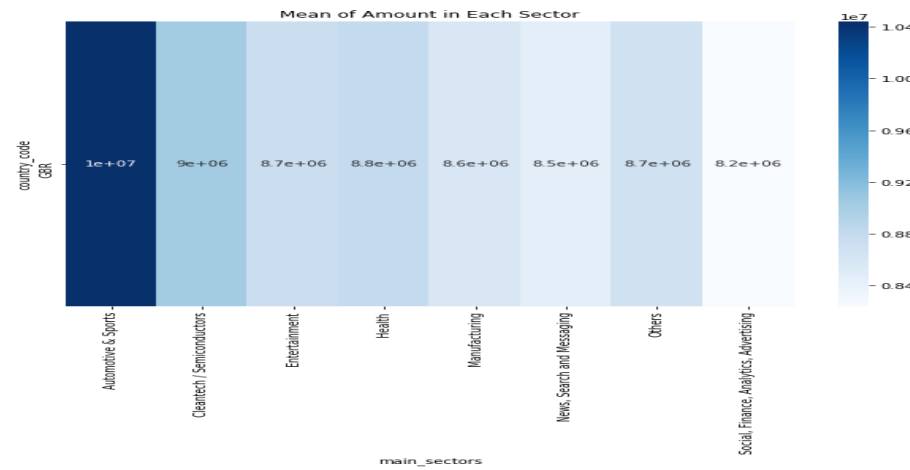
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2) Top Cities from the top three Sectors:

Top Cities For Others Sectors

Top Cities For Social, Finance, Analytics, Advertising Sector

Top Cities For Cleantech / Semiconductors Sector

3) Top Companies from the top 3 sectors :

Total Amount Invested in Each Company from Other Sector

Total Amount Invested in Each Company from Social, Finance, Analytics, Advertising Sector

Total Amount Invested in Each Company from Cleantech / Semiconductors Sector

b) 1) Top Sectors in GBR : From the below plots it is observed that, the top3 sectors of GBR are (1) Others (2) Social, Finance, Analytics, Advertising (3) Cleantech / Semiconductors

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2) Top Cities from the top three Sectors:

Top Cities in Others Sector

Top Cities in Cleantech / Semiconductors Sector
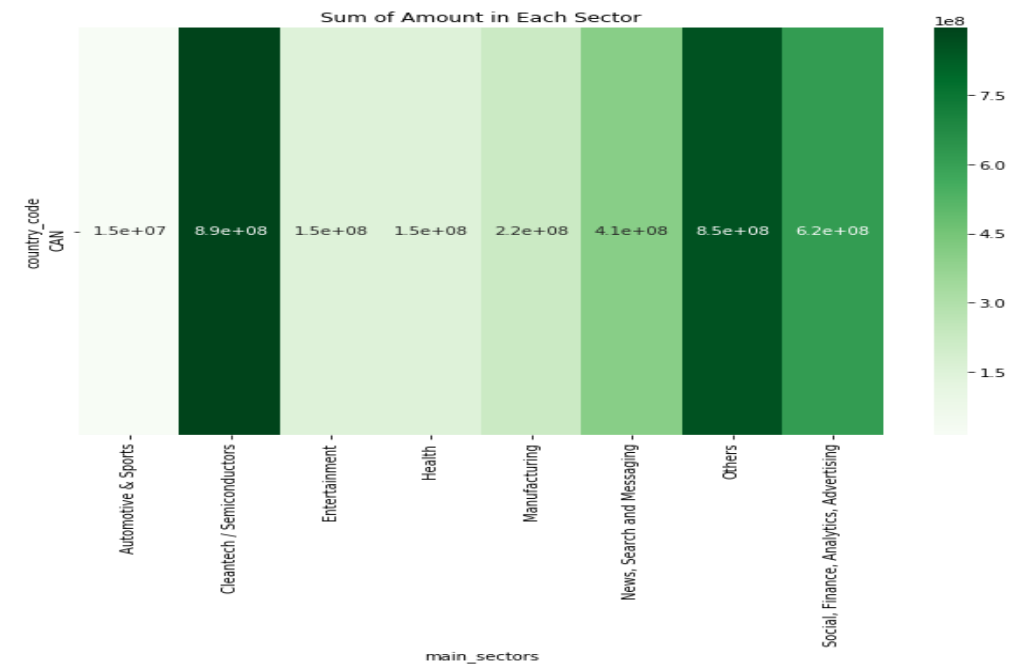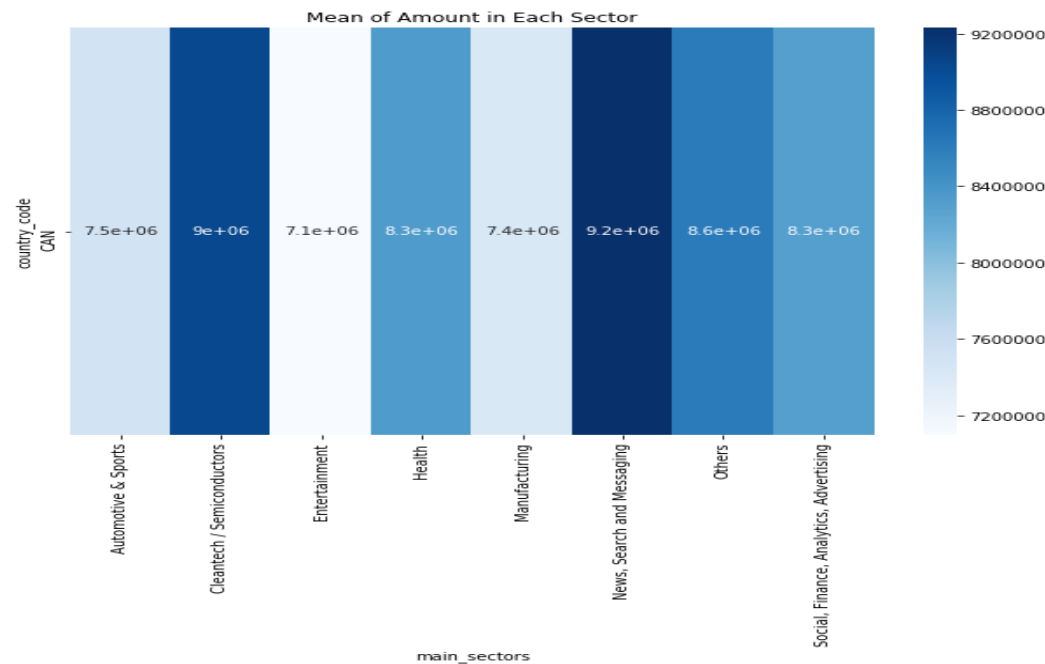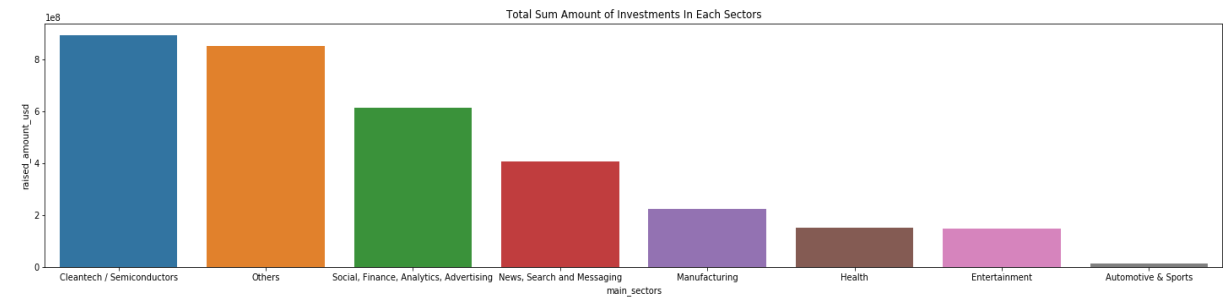
Top Cities in Cleantech / Semiconductors Sector

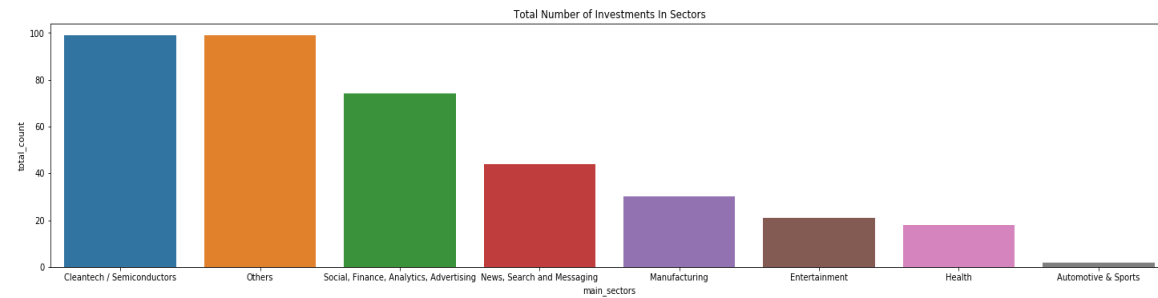**3) Top Companies from the top three Sectors:**

Top Companies from Others Sector

Top Companies from Social, Finance, Analytics, Advertising Sector

Top Companies from Cleantech / Semiconductors Sector
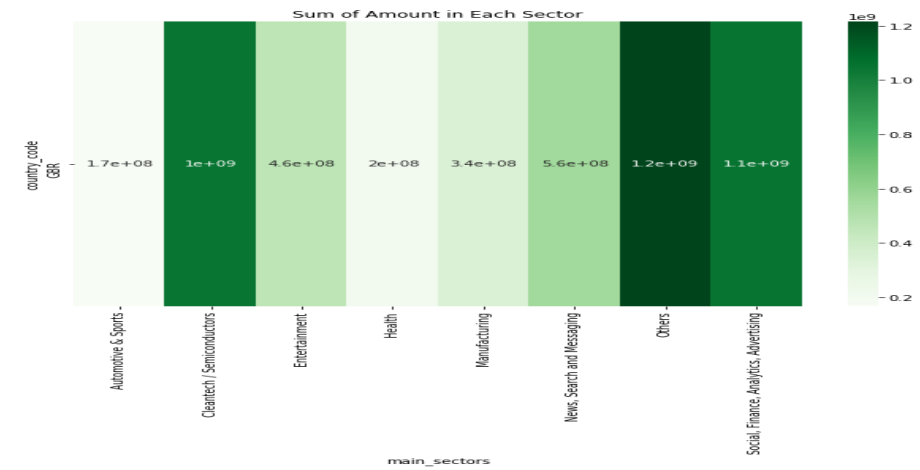
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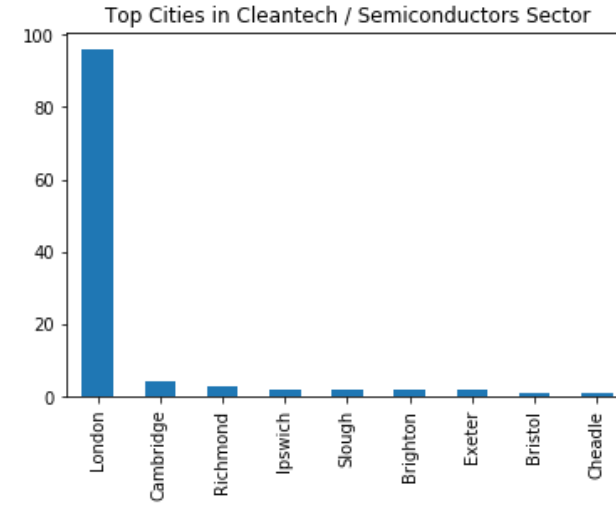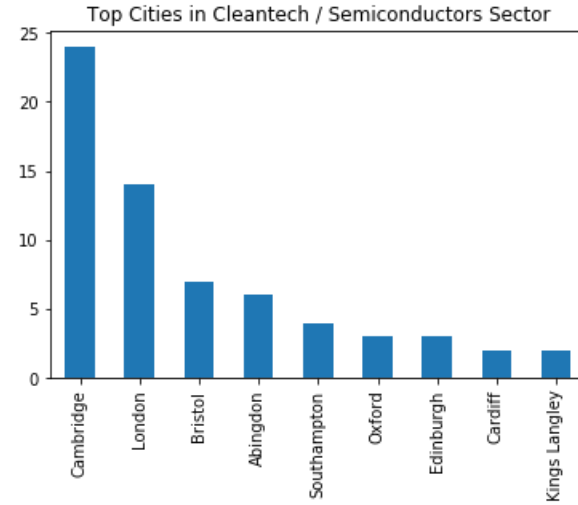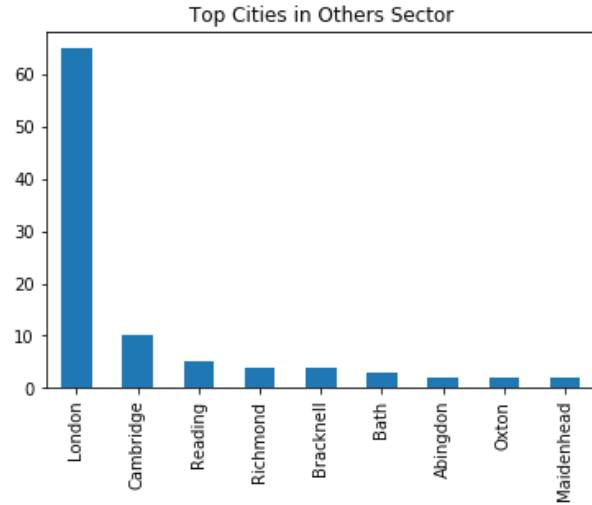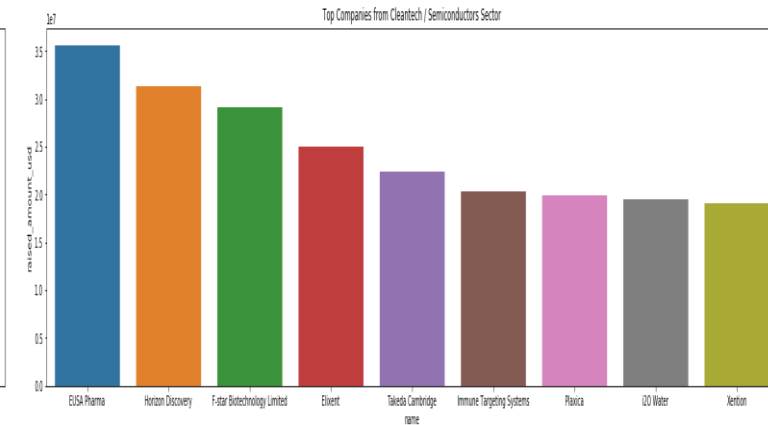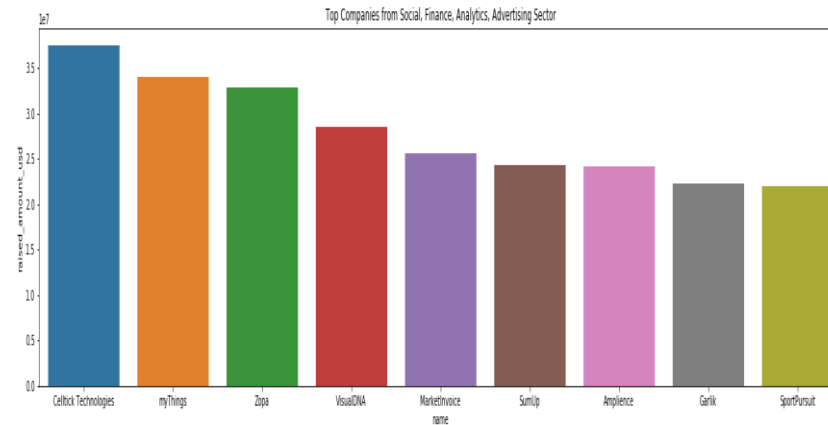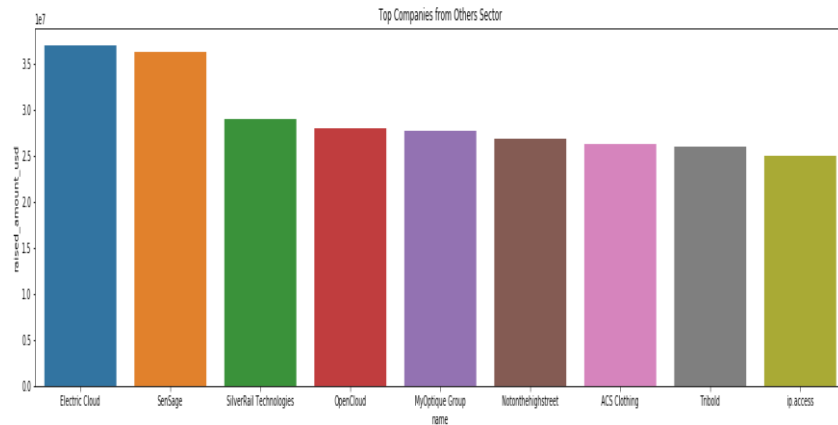
c) 1) Top Sectors in CAN :

2) Top Companies in top 3 Sectors :

Top Companies from Cleantech / Semiconductors Sector

Top Companies from Others Sector

Top Companies from Social, Finance, Analytics, Advertising Sector
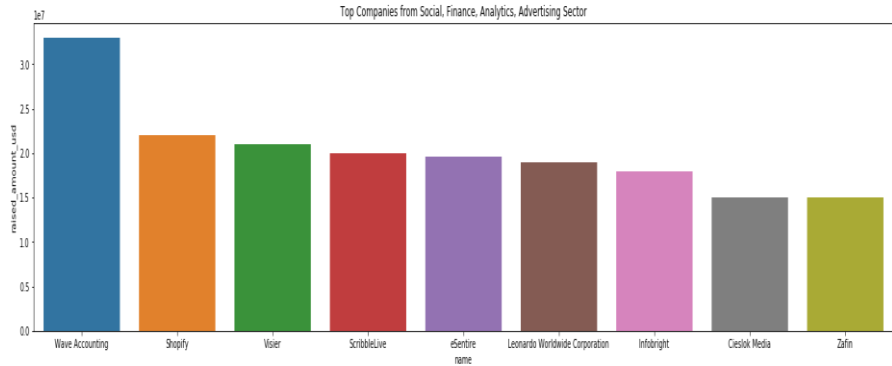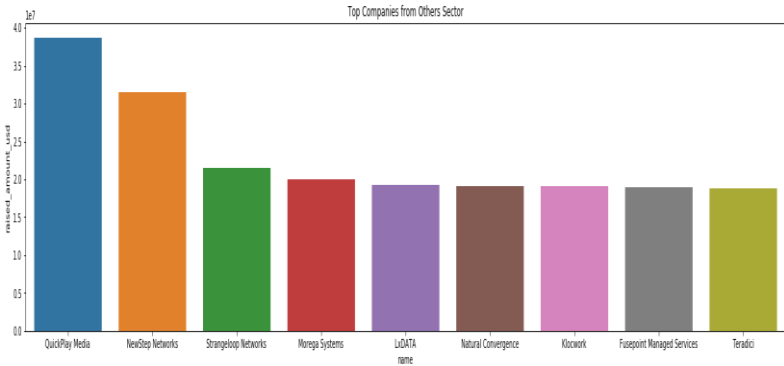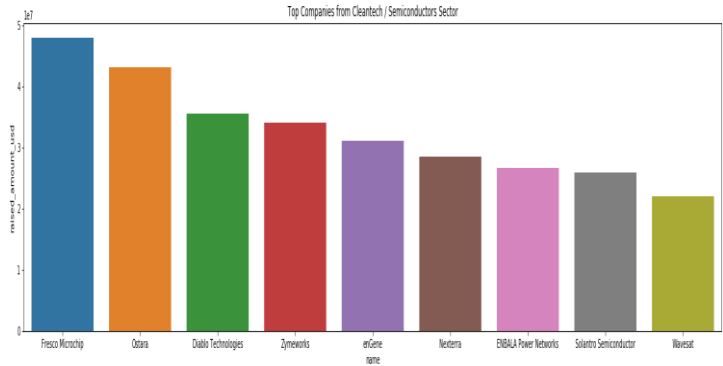
Final Output Analysis :

Country Name	Top 3 Sectors	No of Investments	Total Amount	Top Company
USA (United States of America)	Others	2758	2.463670e+10	Virtustream
	Social,Finance,Analytics,Advertising	2590	2.283077e+10	SST Inc. (Formerly ShotSpotter)
	Cleantech/ Semiconductors	2192	2.012233e+10	Biodesix
GBR (United Kingdom)	Others	140	1.215442e+09	Electric Cloud
	Social,Finance,Analytics,Advertising	128	1.054628e+09	Celltick Technologies
	Cleantech/ Semiconductors	116	1.048294e+09	EUSA Pharma
CAN (Canada)	Cleantech/ Semiconductors	99	894427439.0	Fresco Microchip
	Others	99	853207962.0	QuickPlay Media
	Social,Finance,Analytics,Advertising	74	615143075.0	Wave Accounting

Conclusions

- **Based on the analysis the spark fund can Invest in three Countries, that are USA, GBR, CAN with venture type Investment.**

- **Based on the Sector or Company type the investment can be made accordingly in appropriate country considering various factors.**

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