

INVESTMENT ASSIGNMENT

SUBMISSION

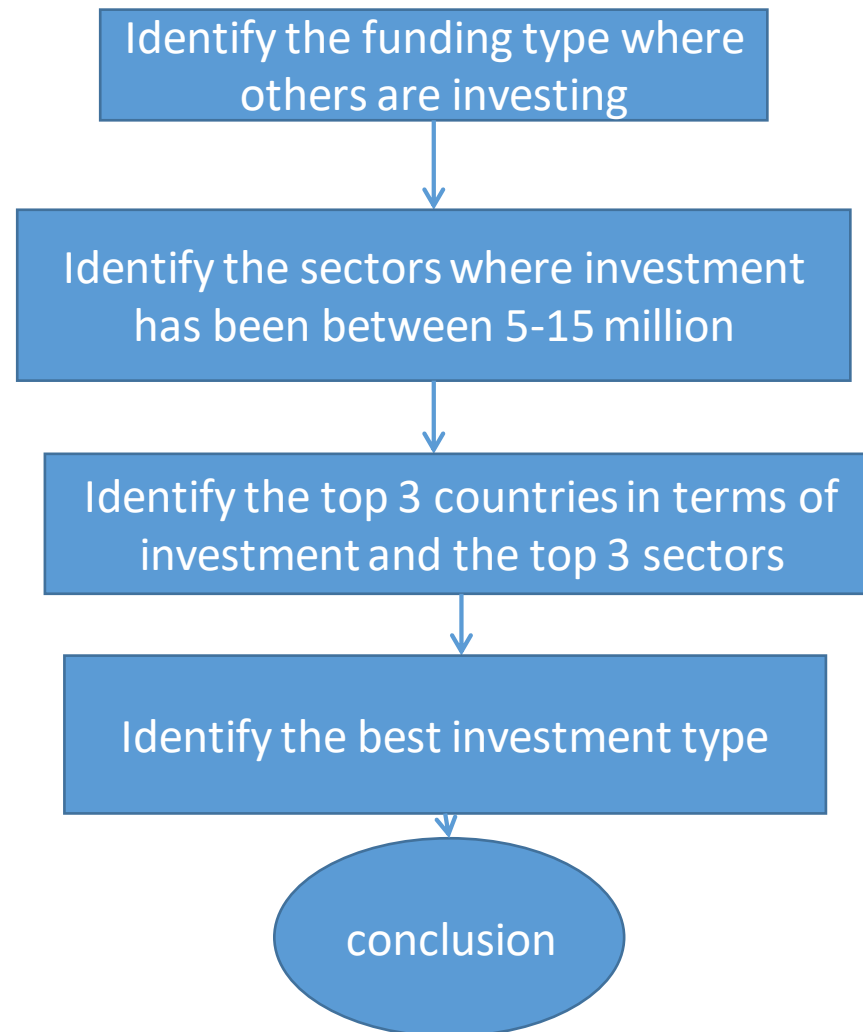
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Abstract:

Spark Funds wants to make investments in a few companies. The CEO of Spark Funds wants to understand the global trends in investments so that she can take the investment decisions effectively. The assignment tries to understand the provided data and arrive at a concrete conclusion.

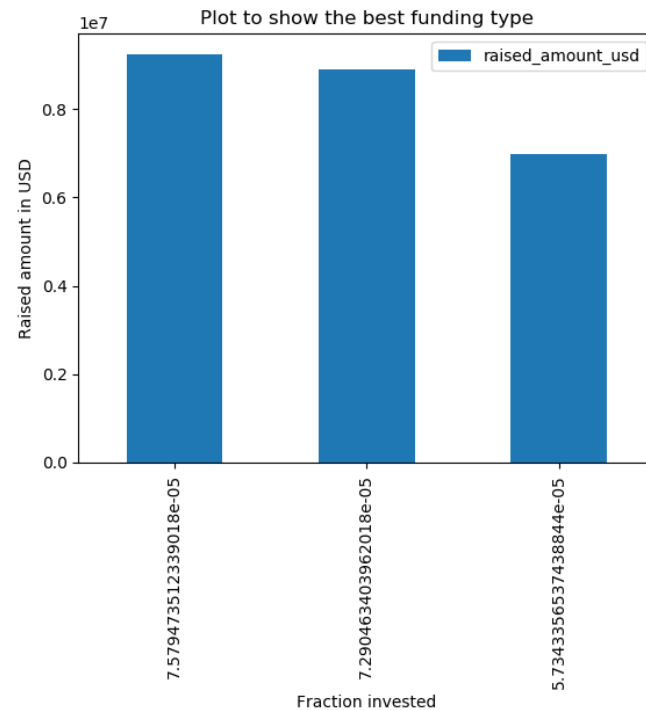
- Business objective: The objective of the organization is to identify the best sectors, countries, and a suitable investment type for making investments. The overall strategy is to invest where others are investing, implying that the 'best' sectors and countries are the ones 'where most investors are investing'.
- Goals of data analysis: Company's goals are divided into three sub-goals:
 - Investment type analysis: Comparing the typical investment amounts in the venture, seed, angel, private equity etc. so that Spark Funds can choose the type that is best suited for their strategy.
 - Country analysis: Identifying the countries which have been the most heavily invested in the past.
 - Sector analysis: Understanding the distribution of investments across the eight main sectors.
- Tools and Technologies Used :
 - Python has been used throughout the assignment for data analysis .
 - Microsoft excel has been used to record the observations

Problem solving methodology



Analysis

- **Identifying the sectors where other companies are investing :**
 - On analysing the data it was concluded that most of the companies are investing in the ‘Venture’ funding type .
 - A Graph indicating the same is mentioned below :



Analysis

- Determining the funding type where investment is between 5-15 million
 - The funding types – venture , seed , private equity , angel meet the criteria

Average funding amount of venture type

```
In [358]: master_frame.fillna(0,inplace=True)
master_frame['raised_amount_usd']=master_frame['raised_amount_usd'].astype(float)
funding_round_type_venture=master_frame['funding_round_type']=='venture'
mean_for_venture_type = master_frame.loc[funding_round_type_venture, 'raised_amount_usd'].mean()
print(mean_for_venture_type)

10635651.472583726
```

Average funding amount of angel type

```
In [359]: funding_round_type_angel=master_frame['funding_round_type']=='angel'
mean_for_angel_type=master_frame.loc[funding_round_type_angel,'raised_amount_usd'].mean()
print(mean_for_angel_type)

764940.9165982597
```

Average funding amount of seed type

```
In [360]: funding_round_type_seed=master_frame['funding_round_type']=='seed'
mean_for_seed_type=master_frame.loc[funding_round_type_seed,'raised_amount_usd'].mean()
print(mean_for_seed_type)

556818.210553934
```

Average funding type of private equity type

```
In [361]: funding_round_type_private_equity=master_frame['funding_round_type']=='private_equity'
mean_for_private_equity_type=master_frame.loc[funding_round_type_private_equity,'raised_amount_usd'].astype(float).mean()
print(mean_for_private_equity_type)

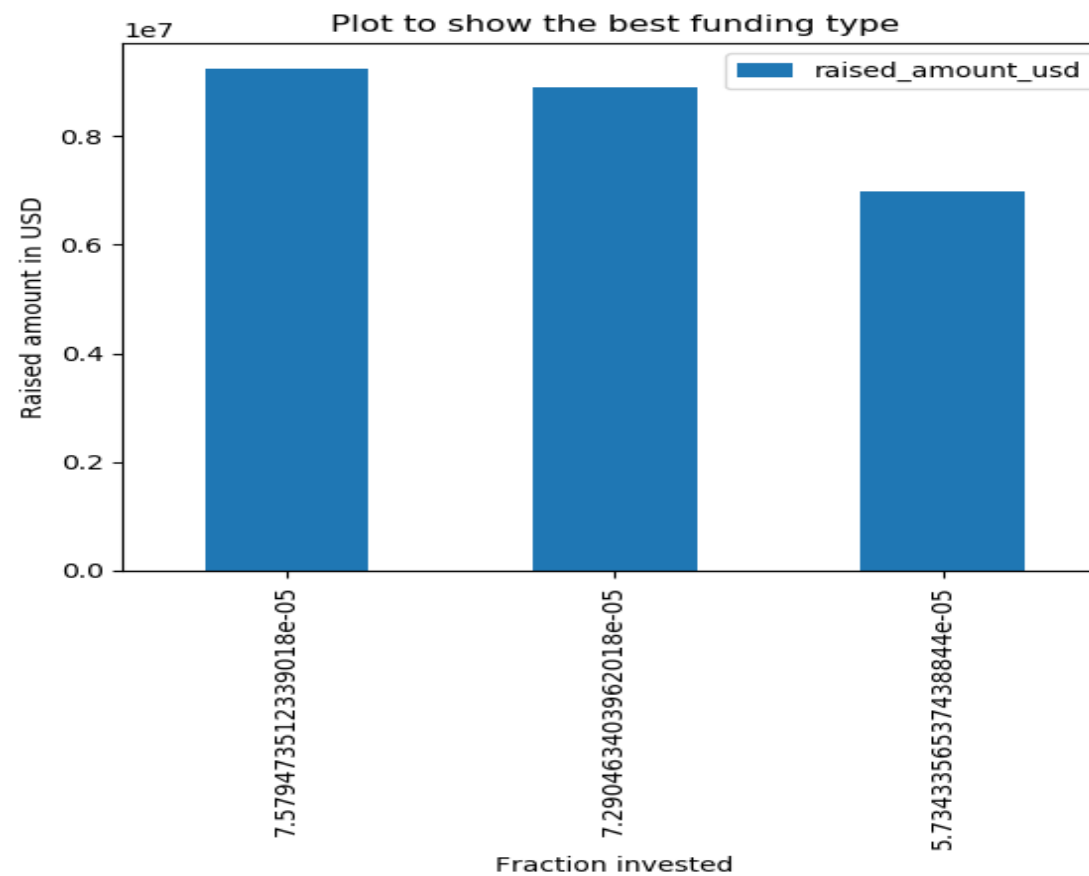
62134732.25350263
```

Analysis

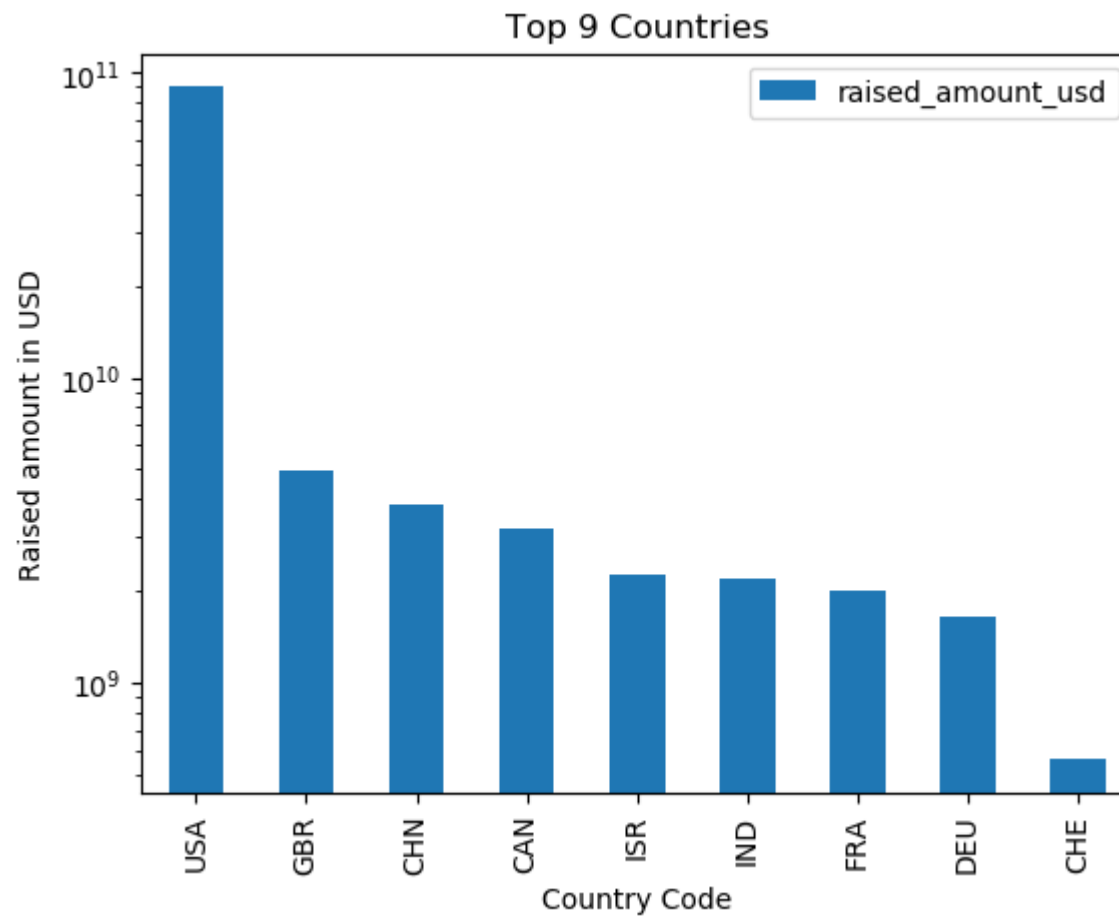
- Determining the top 3 countries and top 3 sectors :
 - On analysing the data we found that the Top 3 countries in terms of English speaking population are India , USA and Great Britain(GBR)
 - The top 3 sectors in these countries were : Software , Ecommerce and Mobile
 - The best investment type as mentioned earlier is 'Venture'

Results

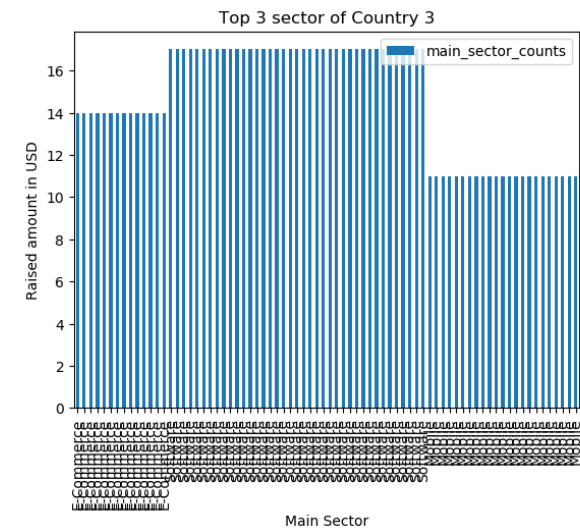
Plot 1 :



Plot 2 :



Plot 3



Conclusions

Based on the analysis , it is recommended that Spark Funds invests in

A. **Funding type** ‘Venture’

B. **Countries** : India , USA , GBR as they have the most English speaking population

C. They should choose **Software , Ecommerce or Mobile as the main sector** as they have been observed to be the top 3 rewarding sectors