

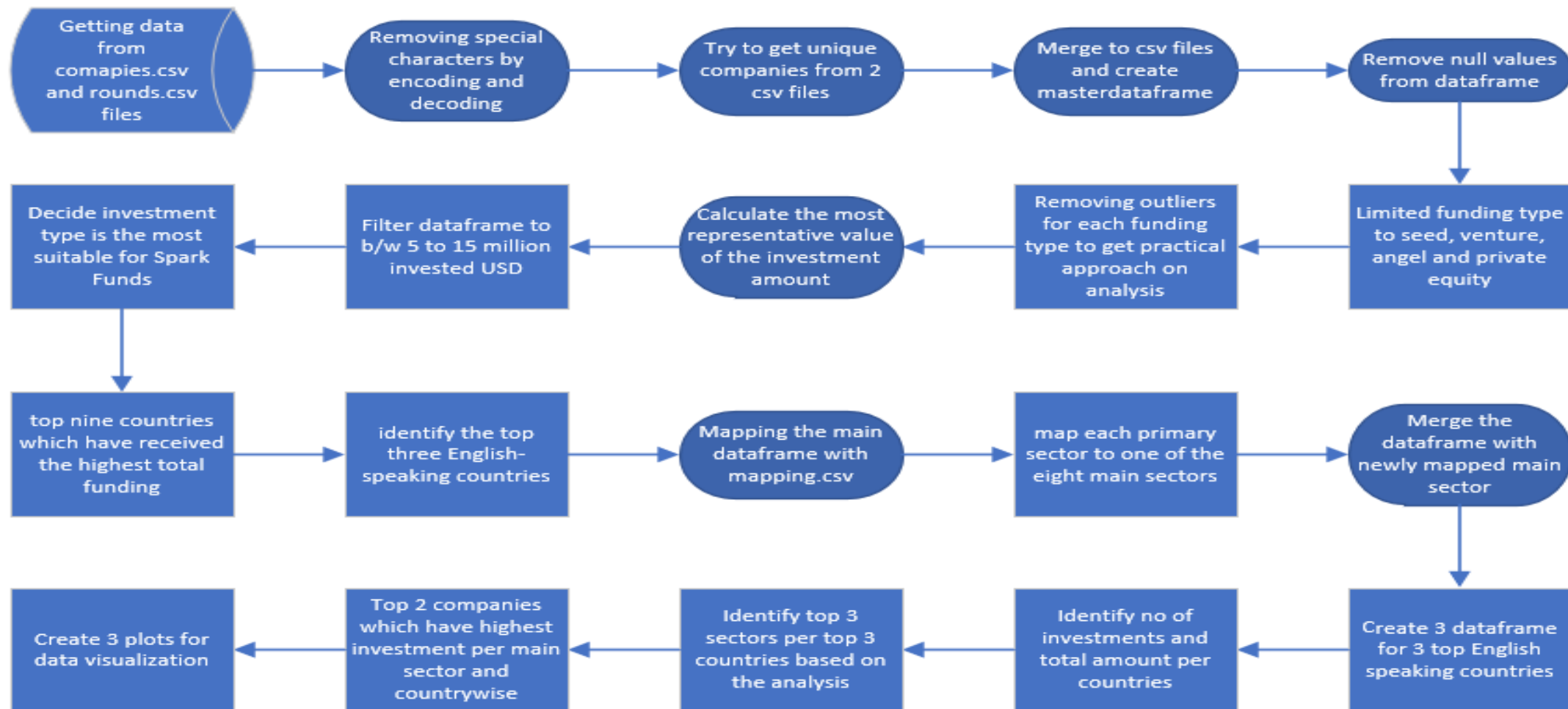
INVESTMENT ASSIGNMENT SUBMISSION

Name: Pujal Jayesh Trivedi

<Abstract>

- **Business objective:** Identify the best sectors, countries, and a suitable investment type
- **Strategy:**
 - Invest where most **other investors are investing**
 - Invest between **5 to 15 million USD** per round of investment
 - Invest only in **English-speaking countries**
 - 'best' sectors and countries are the ones 'where most investors are investing'
- **Data: crunchbase.com**
- **3 types of data analysis:**
 - Investment type analysis
 - Country analysis
 - Sector analysis

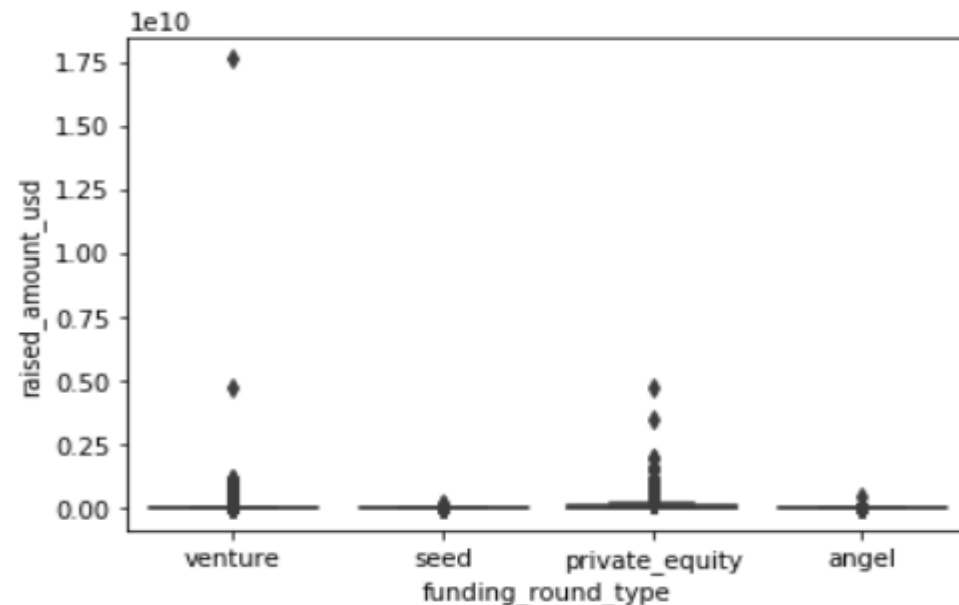
<Problem solving methodology>



<Analysis>

Funding type Analysis

- Collecting the data with 4 different funding types: Venture, Angel, Seed and Private equity
- Removing the outliers for each funding types as there are few outliers which sometimes falsely predict the analysis
- Getting avg of funding amount per funding type in order to get better pic on which funding type is best suited for the analysis



Sl.No	Questions	Answer
1	Average funding amount of venture type	6430618.408
2	Average funding amount of angel type	533331.2539
3	Average funding amount of seed type	500546.109
4	Average funding amount of private equity type	34957882.45
5	Considering that Spark Funds wants to invest between 5 to 15 million USD per investment round, which investment type is the most suitable for them?	venture

<Analysis>

Country Analysis

- **Total invested amount in venture**
- **Top 3 English Speaking countries**
 - 1) Country 1:USA (United States)
 - 2) Country 2:GBR (United Kingdom)
 - 3) Country 3: CAN (Canada)

country_code	
USA	2.632680e+11
GBR	1.522110e+10
CHN	1.235350e+10
CAN	9.278789e+09
IND	8.274541e+09
ISR	6.507577e+09
FRA	5.598663e+09
DEU	4.459986e+09
CHE	2.255774e+09

Sector Analysis 1: mapping with Main sector to Primary Sector

- Extract the primary sector of each category list
- Use the mapping file 'mapping.csv' to map each primary sector to one of the eight main sectors

<Analysis>

Sector Analysis 2:

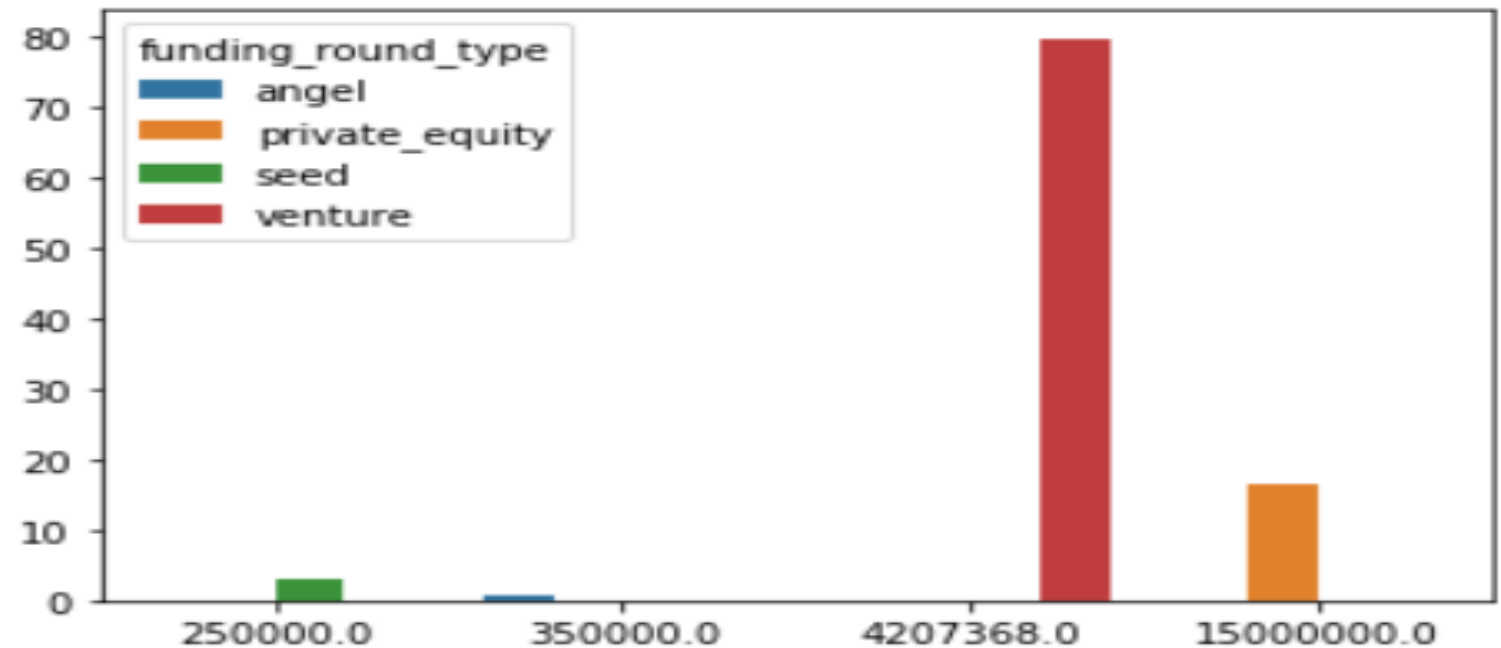
- Identify the most heavily invested main sectors in each of the three countries
- Data is for venture funding type and the invested amount is b/w 5 to 15 M USD range.
- Getting company name for each top 3 countries and top 3 main sectors.

Sector-wise Investment Analysis				
Sl.no	Questions	USA	GBR	CAN
1	Total number of Investments (count)	12149	628	426
2	Total amount of investment (USD)	1.08531E+11	5436843539	3647009578
3	Top Sector name (no. of investment-wise)	Others	Others	Cleantech / Semiconductors
4	Second Sector name (no. of investment-wise)	Social, Finance, Analytics, Advertising	Social, Finance, Analytics, Advertising	Others
5	Third Sector name (no. of investment-wise)	Cleantech / Semiconductors	Cleantech / Semiconductors	Social, Finance, Analytics, Advertising
6	Number of investments in top sector (3)	2950	147	112
7	Number of investments in second sector (4)	2714	133	109
8	Number of investments in third sector (5)	2350	130	78
9	For point 3 (top sector count-wise), which company received the highest investment?	Virtustream	Electric Cloud	Fresco Microchip
10	For point 4 (second best sector count-wise), which company received the highest investment?	SST Inc. (Formerly ShotSpotter)	Celltick Technologies	QuickPlay Media

<Results>

Plot 1:

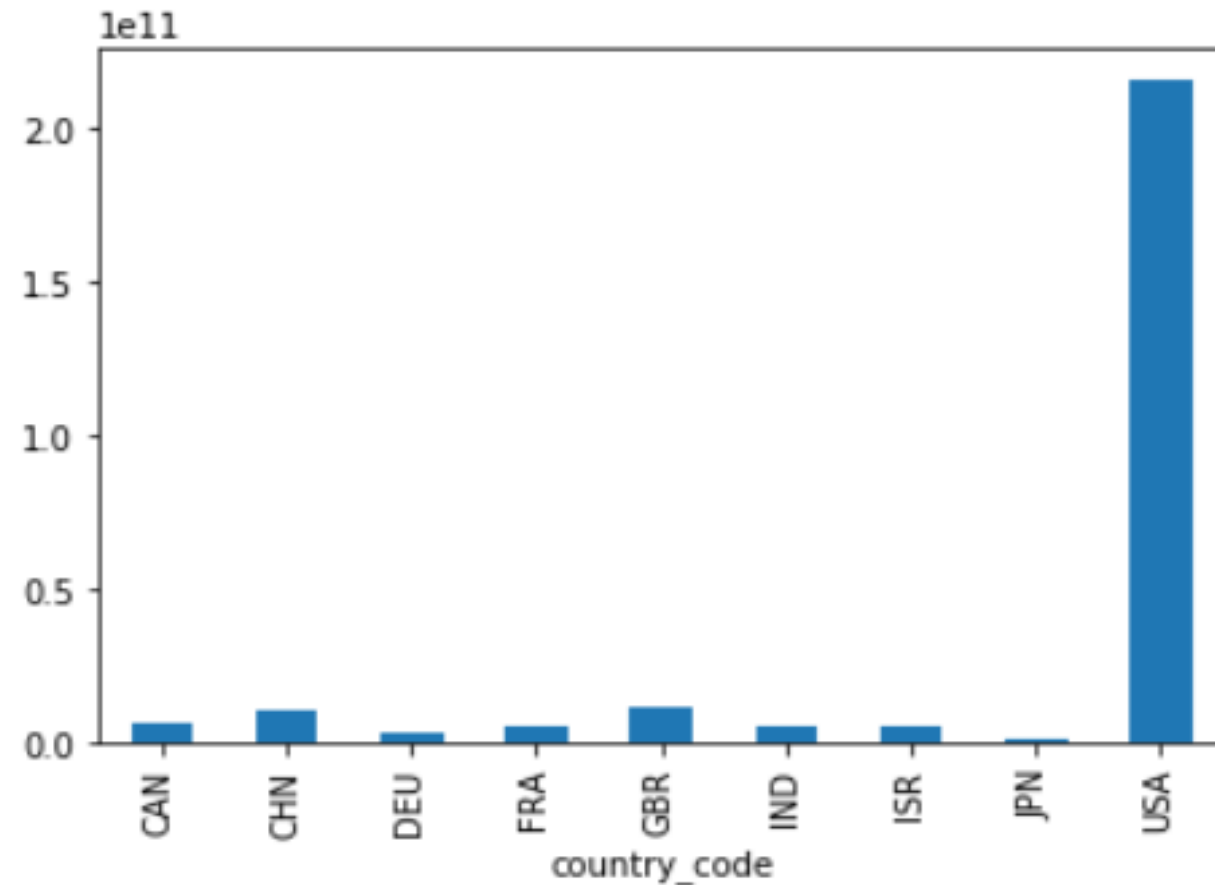
- fraction of total investments (globally) in angel, venture, seed, and private equity, and the average amount of investment in each funding type. **X axis = avg_investment Y axis = fractional of total investment**
- Venture funding type is best suited for Spark Funds



<Results>

Plot 2:

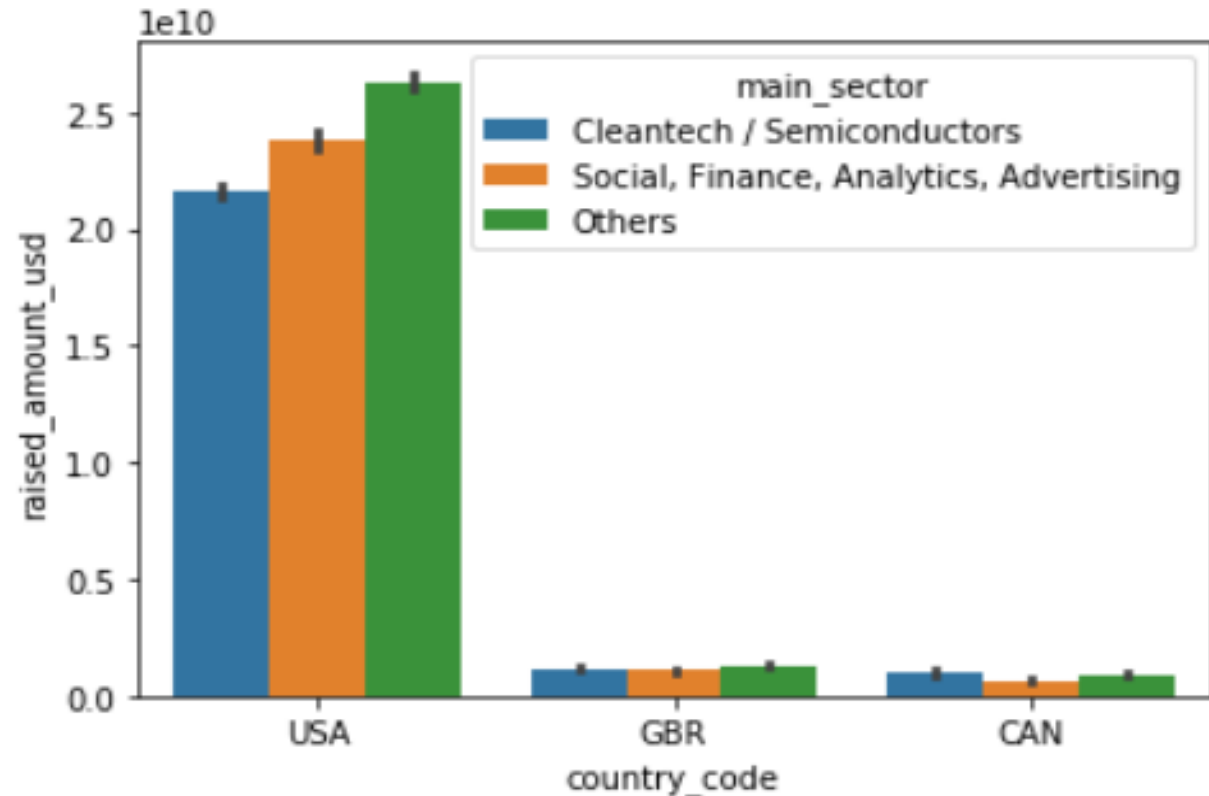
- shows the top 9 countries against the total amount of investments of funding type FT.
- Top 3 English Speaking countries
 - 1) Country 1:USA (United States)
 - 2) Country 2:GBR (United Kingdom)
 - 3) Country 3: CAN (Canada)



<Results>

Plot 3

- shows the total number of investments in the top 3 sectors of the top 3 countries on one chart (for the Venture investment type FT)
- Top 3 main sectors
 - Others
 - Social, Finance, Analytics, Advertising
 - Cleantech / Semiconductors
- Top 3 countries
 - 1) Country 1:USA (United States)
 - 2) Country 2:GBR (United Kingdom)
 - 3) Country 3: CAN (Canada)



<Conclusions>

Suitable investment type: Venture

- **Top 3 best main sectors**
 - Others
 - Social, Finance, Analytics, Advertising
 - Cleantech / Semiconductors
- **Top 3 best English Speaking countries**
 - 1) USA (United States)
 - 2) GBR (United Kingdom)
 - 3) CAN (Canada)