Case Study 2: Questions And Their Solutions

NOTE: THE CSV DATA REQUIRED FOR THIS CASE STUDY IS ATTACHED IN THE MAIN REPO WITH NAME "startup_funding.csv".

1. Your Friend has developed the Product and he wants to establish the product startup and he is searching for a perfect location where getting the investment has a high chance. But due to its financial restriction, he can choose only between three locations - Bangalore, Mumbai, and NCR. As a friend, you want to help your friend deciding the location. NCR include Gurgaon, Noida and New Delhi. Find the location where the most number of funding is done. That means, find the location where startups has received funding maximum number of times. Plot the bar graph between location and number of funding. Take city name "Delhi" as "New Delhi". Check the case-sensitiveness of cities also. That means, at some place instead of "Bangalore", "bangalore" is given. Take city name as "Bangalore". For few startups multiple locations are given, one Indian and one Foreign. Consider the startup if any one of the city lies in given locations.

ANSWER/ANALYSIS:

Among the given locations the trend is as follows:

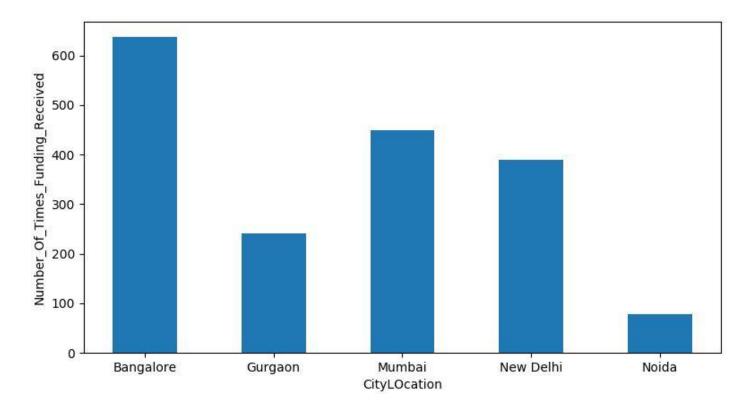
City

Number of Times funding received

BANGALORE	637
GURGAON	241
MUMBAI	449
NEW DELHI	389
NOIDA	79

Bangalore will be the perfect suited location for opening the startup as it is clearly evident from the bar graph given below as well as the trend table given above that startups based in Bangalore have received the fundings maximum number of times (**637** times) among the other locations mentioned

in the question. So there are maximum chances that he can receive funding for his startup in BANGALORE.



BAR GRAPH SHOWING RELATION BETWEEN CityLocation and Number of times funding received

(THE PYTHON CODE FOR THE GIVEN BAR GRAPH IS ATTACHED IN THE REPO WITH NAME "ques1.py")

2. Even after trying for so many times, your friend's startup could not find the investment. So you decided to take this matter in your hand and try to find the list of investors who probably can invest in your friend's startup. Your list will increase the chance of your friend startup getting some initial investment by contacting these investors. Find the top 5 investors who have invested maximum number of times (consider repeat investments in one company also). In a startup, multiple investors might have invested. So consider each investor for that startup. Ignore undisclosed investors.

ANSWER/ANALYSIS:

Among top investors, the figures are as follows:

InvestorName	Number_Of_Times_Investor_Invested
Sequoia Capital	64
Accel Partners	53
Kalaari Capital	44
SAIF Partners	41
Indian Angel Network	40

Thus, if he tries to contact any one of the above 5 investors, he has a very good chance of getting investment for his product startup.

Among these **Sequoia Capital** has invested maximum number of times in startups, so he may contact them .

(Here, undisclosed investors are not considered while determining the figures).

NOTE: The python source code for finding the above data is attached in the repo with the name "ques2.py";

3. After re-analysing the dataset you found out that some investors have invested in the same startup at different number of funding rounds. So before finalising the previous list, you want to improvise it by finding the top 5 investors who have invested in different number of startups. This list will be more helpful than your previous list in finding the investment for your friend startup. Find the top 5 investors who have invested maximum number of times in different companies. That means, if one investor has invested multiple times in one startup, count one for that company. There are many errors in startup names. Ignore correcting all, just handle the important ones - Ola, Flipkart, Oyo and Paytm.

ANSWER/ANALYSIS:

If we find unique investors for each startup company, the data is as follows:

Investors Name

No of times invested(in diff companies)

Sequoia Capital	59
Accel Partners	52
Kalaari Capital	44
SAIF Partners	40
Indian Angel Network	40

So again as we can observe that the top 5 investors remain the same.

So he may contact them regarding investments.

NOTE: The python source code for finding the above data is attached in the repo with the name "ques3.py";

4. Even after putting so much effort in finding the probable investors, it didn't turn out to be helpful for your friend. So you went to your investor friend to understand the situation better and your investor friend explained to you about the different Investment Types and their features. This new information will be helpful in finding the right investor. Since your friend startup is at an early stage startup, the best-suited investment type would be - Seed Funding and Crowdfunding. Find the top 5 investors who have invested in a different number of startups and their investment type is Crowdfunding or Seed Funding. Correct spelling of investment types are - "Private Equity", "Seed Funding", "Debt Funding", and "Crowd Funding". Keep an eye for any spelling mistake. You can find this by printing unique values from this column. There are many errors in startup names. Ignore correcting all, just handle the important ones - Ola, Flipkart, Oyo and Paytm.

ANSWER/ANALYSIS:

If we filter out the investors list limiting the investment types to be only "Seed Funding" and "Crowd Funding", the top 5 investors are as follows:

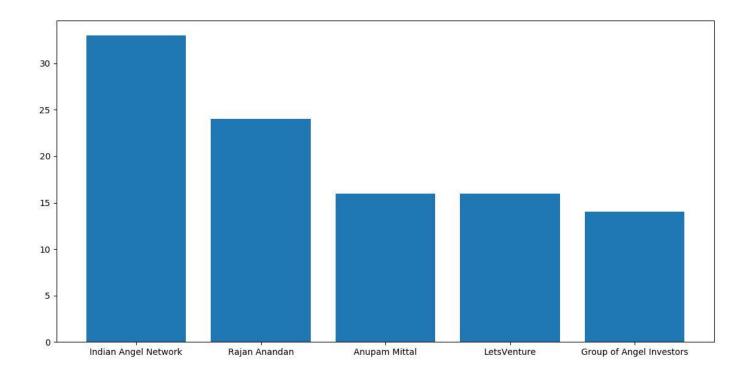
Investor Name

No of times they invested

Indian Angel Network	33
Rajan Anandan	24
LetsVenture	16
Anupam Mittal	16
Group of Angel Investors	14

Thus, he may contact any one of them for investments of type Seed and Crowd Funding for his startup.

→ Bar graph for above table is attached on next page.



NOTE: The python source code for finding the above data is attached in the repo with the name "ques4.py";

5. Due to your immense help, your friend startup successfully got seed funding and it is on the operational mode. Now your friend wants to expand his startup and he is looking for new investors for his startup. Now you again come as a saviour to help your friend and want to create a list of probable new new investors. Before moving forward you remember your investor friend advice that finding the investors by analysing the investment type. Since your friend startup is not in early phase it is in growth stage so the best-suited investment type is Private Equity. Find the top 5 investors who have invested in a different number of startups and their investment type is Private Equity. Correct spelling of investment types are - "Private Equity", "Seed Funding", "Debt Funding", and "Crowd Funding". Keep an eye for any spelling mistake. You can find this by printing unique values from this column. There are many errors in startup names. Ignore correcting all, just handle the important ones - Ola, Flipkart, Oyo and Paytm.

ANSWER/ANALYSIS:

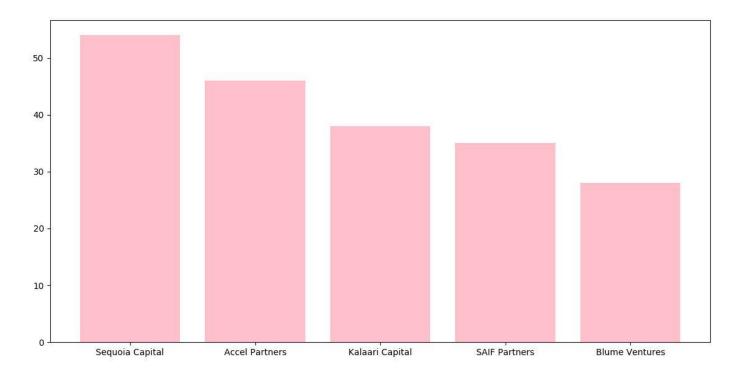
Now as he demand investments of type "Private Equity" for his startup, the top 5 investors are as follows(Sorted in non increasing way by number of times they invested):

Investor Name
Sequoia Capital
Accel Partners
Kalaari Capital
SAIF Partners
Blume Ventures

The bar graph for Investors vs No of times they invested is shown on next page.

So he may contact any one of them to find suitable Investors for his startup venture.

Among them **Sequoia Capital** has invested max no. of times in startups so he has a good chance of finding investors in them.



NOTE: The python source code for finding the above data is attached in the repo with the name "ques5.py";