

# Explanations

## PROBLEM-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.

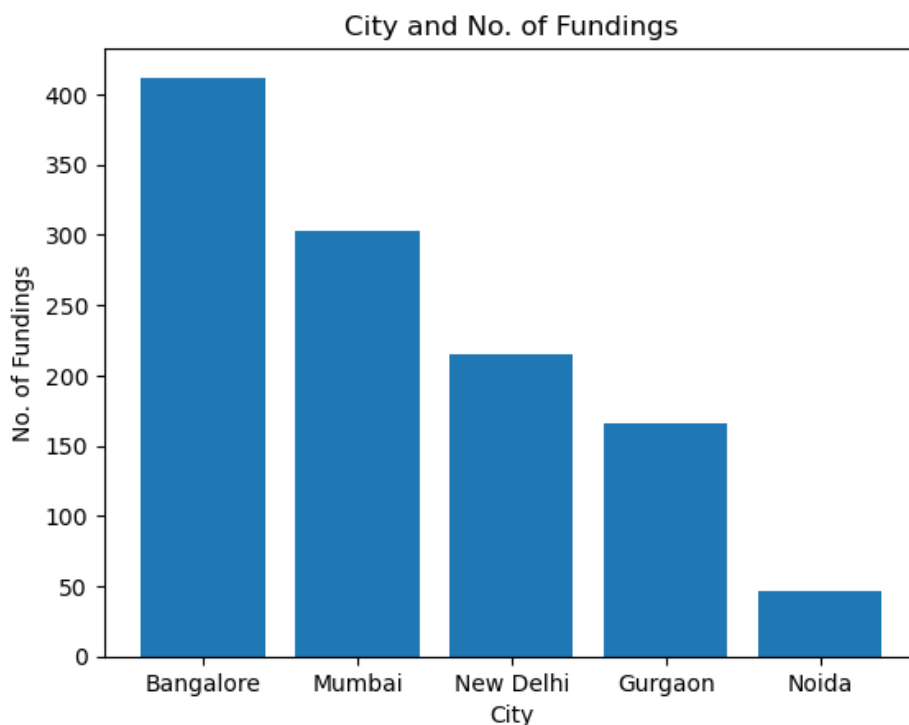
**Bangalore 412**

**Mumbai 303**

**New Delhi 215**

**Gurgaon 166**

**Noida 46**



## Explanation: -

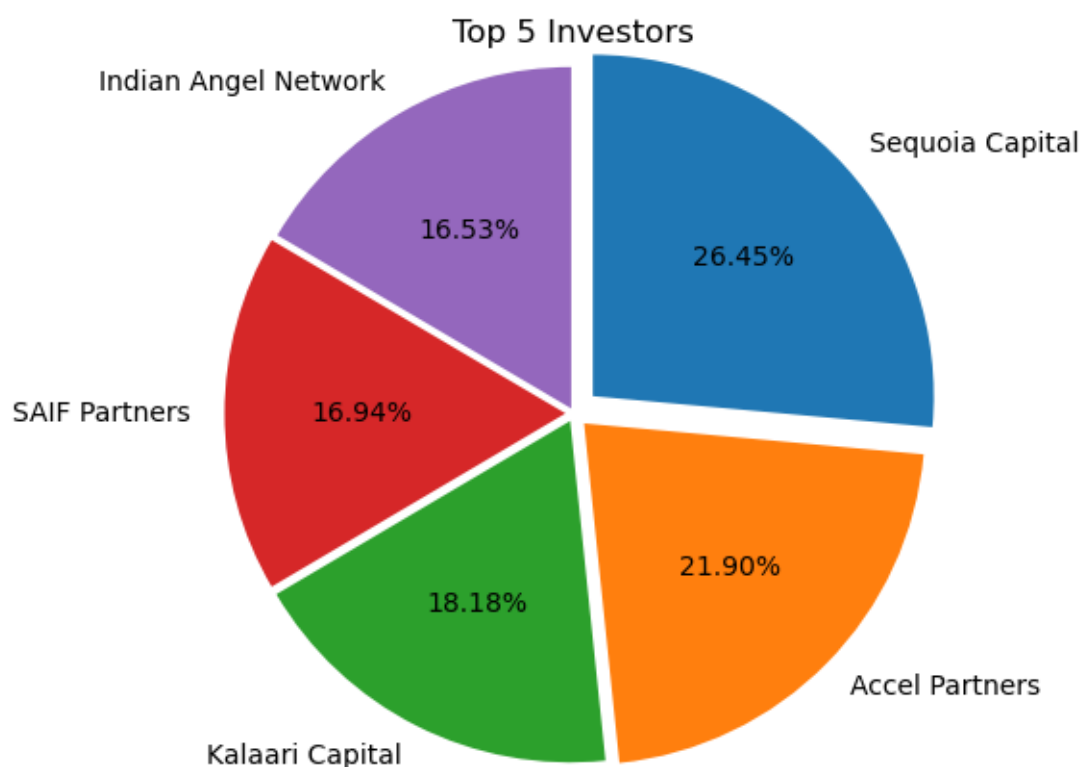
- 1.Handle the missing value in 'CityLocation' and 'AmountInUSD' this will help to skip the non informative rows.
- 2.Then correcting the name of the of the city name 'Bangalore' and 'Delhi'.
- 3.Now filter the row with city names 'Bangalore','Mumbai','Gurgaon','Noida' and 'New Delhi'.

- 4.Count the number of time funding was given to a city and sort the data in descending order.
- 5.Store the name of the city and no of time the funding is given to a city and print the data.
- 6.Plot the bar graph with the help of variable we created in above steps.

## PROBLEM-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.

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



### Explanation:-

- 1.Handle the missing value in 'InvestorsName' this will help to skip the non informative rows.
- 2.Filtering the undisclosed investors in 'InvestorsName' column.
- 3.Now appending the Investors Name in a list 'investors' and if a row contain more investors then splitting it and appending it in a list 'investors'.

4.Now counting the frequency of an investor with the help of dictionary.(This will tell how many time an investor have invested)

5.Then Sort the dictionary in desending order.

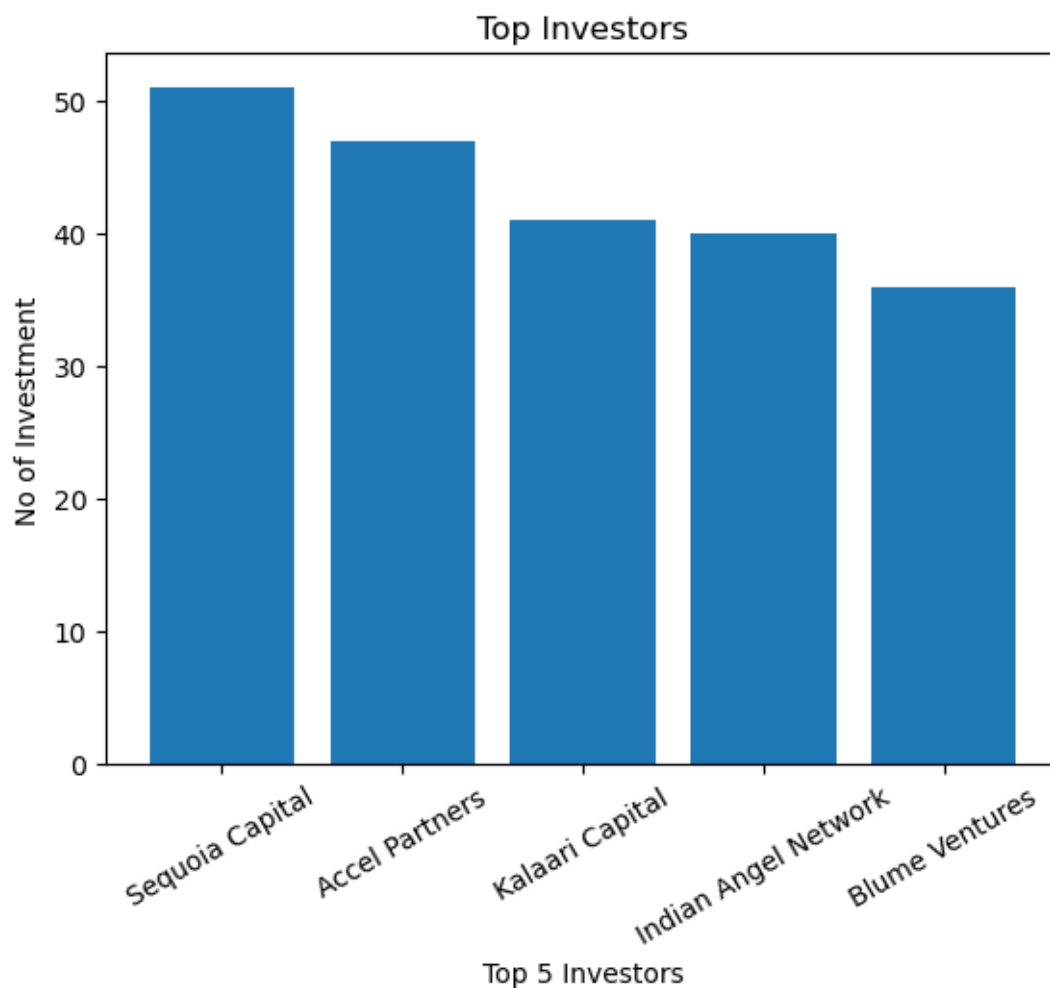
6.Then store and print the name of investors and no of times they have invested(we are storing the information to plot the pie chart).

7.Plot the pie chart with the help of variable we created in above steps.

### PROBLEM-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.

```
Sequoia Capital 51
Accel Partners 47
Kalaari Capital 41
Indian Angel Network 40
Blume Ventures 36
```



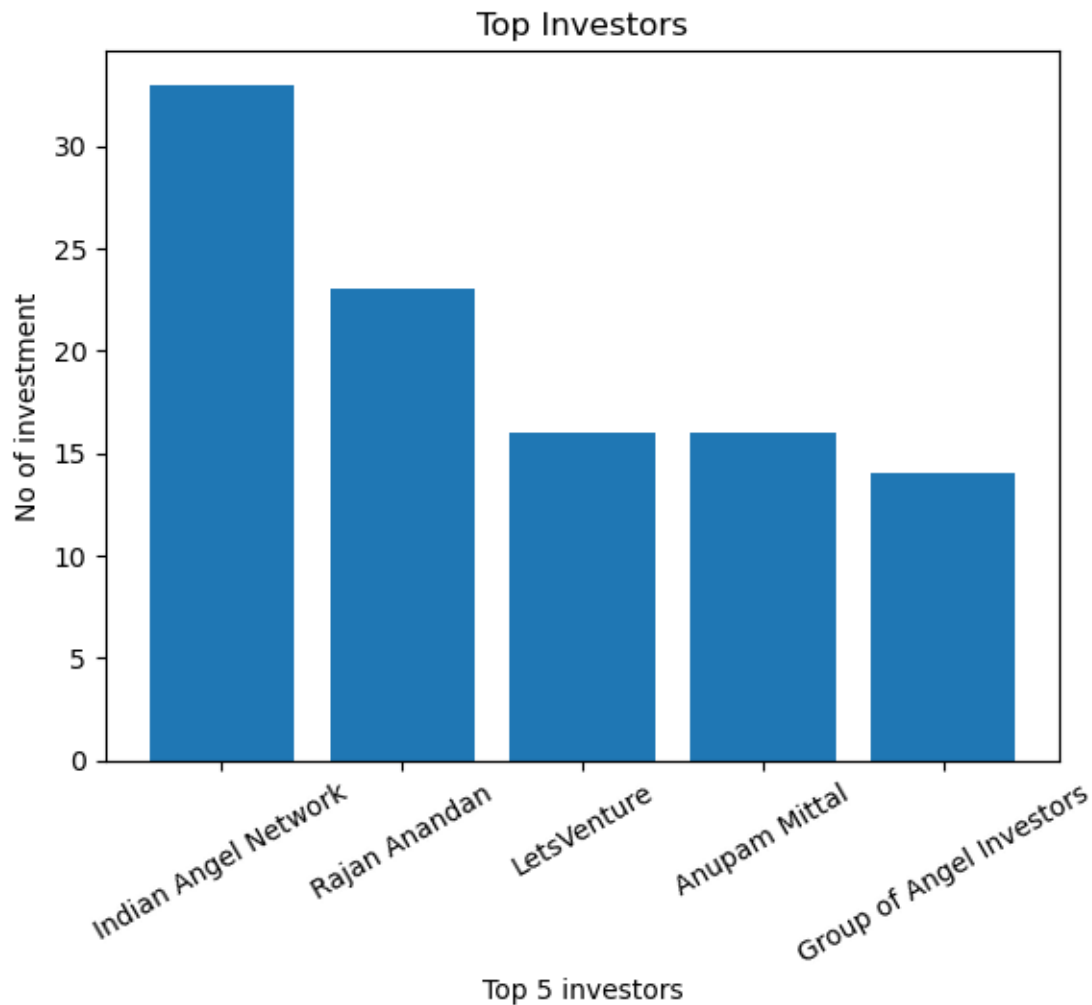
## Explanation: -

- 1.Handle the missing value in 'Investors Name' and Startup Name this will help to skip the non informative rows.
- 2.Filtering the undisclosed investors in 'InvestorsName' column.
- 3.Then correcting the the name of top Start-ups like 'Oyo','Ola','Flipkart','Paytm'.
- 4.Now appending the Investors Name and Startup Name they have invested in 'investors' & 'StartupName' and if a row contain more investors then splitting it and appending it in a list 'investors'.
- 5.Create a new data Frame with columns Investors Name and with startup name they have invested in.
- 6.Then group the Investors name invested in no of unique start-up and sort it in desending order.
- 7.Then store and print the name of investors and no of times they have invested in unique statr-ups(we are storing the information to plot the pie chart).
- 8.Plot the Bar-Graph with the help of variable we created in above steps.

## PROBLEM-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.

```
Indian Angel Network 33
Rajan Anandan 23
LetsVenture 16
Anupam Mittal 16
Group of Angel Investors 14
```



### Explanation: -

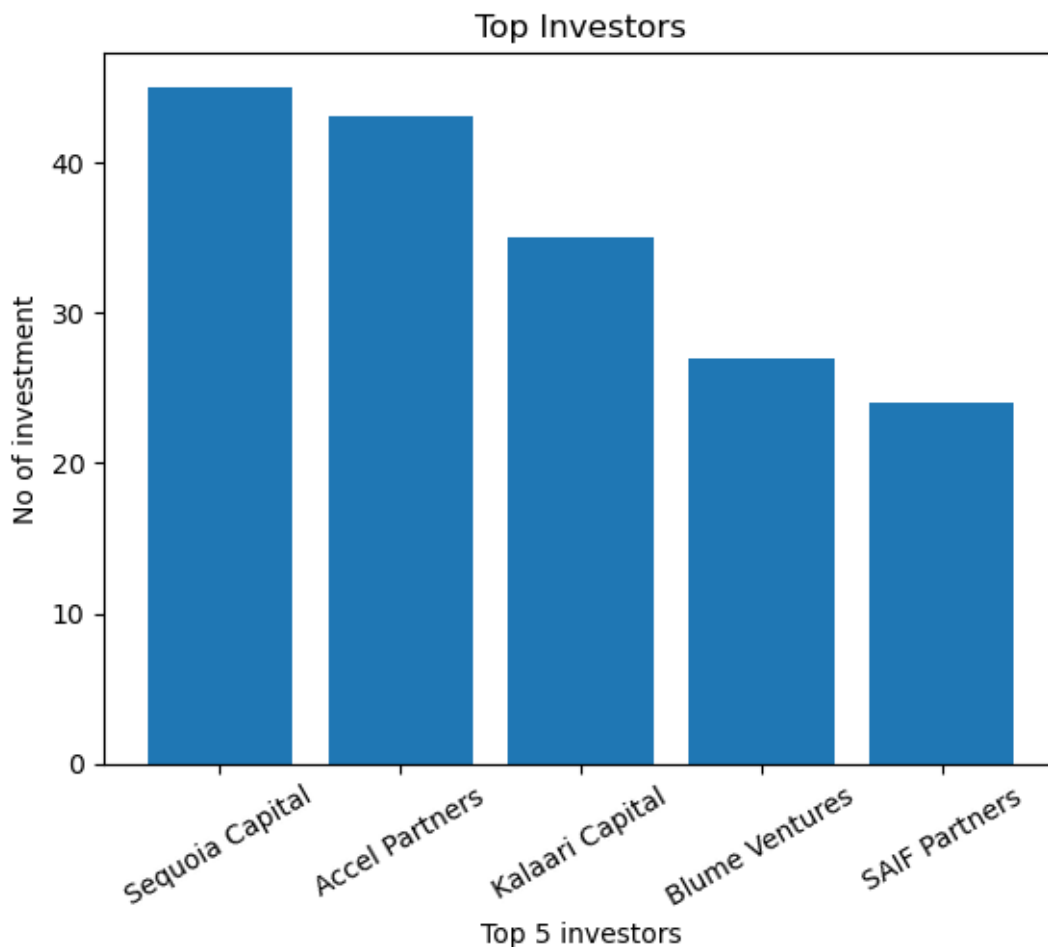
1. Handle the missing value in 'Investors Name' and Startup Name this will help to skip the non informative rows.
2. Filtering the undisclosed investors in 'InvestorsName' column.
3. Then correcting the the name of top Start-ups like 'Oyo','Ola','Flipkart','Paytm'.
4. Then correcting the the name of Investment Type like 'Seed Funding'&'Crowd Funding'.
5. Then filtering the Investment Type only of 'Seed Funding'&'Crowd Funding'.
6. Now appending the Investors Name and Startup Name they have invested in 'investors' & 'StartupName' and if a row contain more investors then splitting it and appending it in a list 'investors'.
7. Create a new data Frame with columns Investors Name and with startup name they have invested in.
8. Then group the Investors name invested in no of unique start-up and sort it in desending order.
9. Then store and print the name of investors and no of times they have invested in unique statr-ups(we are storing the information to plot the pie chart).

10. Plot the Bar-Graph with the help of variable we created in above steps.

## PROBLEM-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.

```
Sequoia Capital 45
Accel Partners 43
Kalaari Capital 35
Blume Ventures 27
SAIF Partners 24
```



Explanation: -

1. Handle the missing value in 'Investors Name' and Startup Name this will help to skip the non informative rows.
2. Filtering the undisclosed investors in 'InvestorsName' column.
3. Then correcting the the name of top Start-ups like 'Oyo','Ola','Flipkart','Paytm'.
4. Then correcting the the name of Investment Type like 'Private Equity'.
5. Then filtering the Investment Type only of 'Private Equity'.
6. Now appending the Investors Name and Startup Name they have invested in 'investors' & 'StartupName' and if a row contain more investors then splitting it and appending it in a list 'investors'.
7. Create a new data Frame with columns Investors Name and with startup name they have invested in.
8. Then group the Investors name invested in no of unique start-up and sort it in descending order.
9. Then store and print the name of investors and no of times they have invested in unique start-ups (we are storing the information to plot the pie chart).
10. Plot the Bar-Graph with the help of variable we created in above steps.