



```
In [7]: #Project Name - Shark Tank India
#Project Type - EDA
#Contribution - Individual
#Name - Bhavna Mogha
#Problem Statement and Project Background
#Exploratory data analysis is an approach of analyzing data sets to summarize

#Problem Statement

#As a fan of Shark Tank India, you might be curious about

#Github Link -
#Github Link:- https://github.com/BhavnaMogha/India-Shark-Tank-Season-1-Project

#Let's Begin !
```

# Shark Tank India

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## About

Shark Tank India is an Indian Hindi-language business reality television series that airs on Sony Entertainment Television. The show is the Indian franchise of the American show Shark Tank. It shows entrepreneurs making business presentations to a panel of investors or sharks, who decide whether to invest in their company. This data is about the first season of Shark Tank India premiered on 20 December 2021, and concluded on 4 February 2022

## Importing Required Modules

1. importing numpy for mathematical operation on arrays and dataframe.
2. importing pandas for reading data and data manipulation.
3. importing matplotlib and seaborn to show the insights and visualization from the dataset.
4. importing warnings for Warning messages that are typically issued in dataframe where it is useful to alert the user of some condition in a program, where that condition (normally) doesn't warrant raising an exception and terminating the program.

```
In [1]: import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import warnings
```

```
warnings.filterwarnings("ignore")
```

```
In [2]: sns.set(style = 'darkgrid')
```

```
In [6]: pd.set_option('display.max_columns',None)
```

## Reading Dataset and Checking the NaN Values , Data Types , and Statistical Analysis

1. Since data is in form of excel file we have to use pandas read\_excel to load the data
2. After loading it is important to check the complete information of data as it can indicate many of the hidden information such as null values in a column or a row
3. Check whether any null values are there or not. if it is present then following can be done,
  - A. Filling NaN values with mean, median and mode using fillna() method
4. Describe data --> which can give statistical analysis

```
In [7]: df=pd.read_csv("Shark Tank India Dataset.csv")
```

```
In [8]: df.head(3)
```

```
Out[8]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_ar
0	1	1	BluePine Industries	Frozen Momos	1	
1	1	2	Booz scooters	Renting e-bike for mobility in private spaces	1	
2	1	3	Heart up my Sleeves	Detachable Sleeves	1	

```
In [7]: # No. of successful deals & unsuccessful  
# Most Dealinh Episodes  
# Most Expensive dealing episode
```

```
In [8]: (75/16)*100
```

```
Out[8]: 468.75
```

```
In [9]: df.shape
```

Out[9]: (117, 28)

In [10]: `df.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 117 entries, 0 to 116
Data columns (total 28 columns):
#   Column                                Non-Null Count  Dtype
---  -
0   episode_number                       117 non-null    int64
1   pitch_number                         117 non-null    int64
2   brand_name                           117 non-null    object
3   idea                                 117 non-null    object
4   deal                                 117 non-null    int64
5   pitcher_ask_amount                   117 non-null    float64
6   ask_equity                           117 non-null    float64
7   ask_valuation                        117 non-null    float64
8   deal_amount                          117 non-null    float64
9   deal_equity                          117 non-null    float64
10  deal_valuation                       117 non-null    float64
11  ashneer_present                      117 non-null    int64
12  anupam_present                       117 non-null    int64
13  aman_present                         117 non-null    int64
14  namita_present                       117 non-null    int64
15  vineeta_present                      117 non-null    int64
16  peyush_present                       117 non-null    int64
17  ghazal_present                       117 non-null    int64
18  ashneer_deal                        117 non-null    int64
19  anupam_deal                         117 non-null    int64
20  aman_deal                           117 non-null    int64
21  namita_deal                         117 non-null    int64
22  vineeta_deal                        117 non-null    int64
23  peyush_deal                         117 non-null    int64
24  ghazal_deal                         117 non-null    int64
25  total_sharks_invested                117 non-null    int64
26  amount_per_shark                     117 non-null    float64
27  equity_per_shark                     117 non-null    float64
dtypes: float64(8), int64(18), object(2)
memory usage: 25.7+ KB
```

In [11]: `df.isnull().sum()`

```

Out[11]: episode_number      0
         pitch_number        0
         brand_name          0
         idea                0
         deal                0
         pitcher_ask_amount   0
         ask_equity           0
         ask_valuation        0
         deal_amount          0
         deal_equity          0
         deal_valuation       0
         ashneer_present      0
         anupam_present       0
         aman_present         0
         namita_present       0
         vineeta_present      0
         peyush_present       0
         ghazal_present       0
         ashneer_deal         0
         anupam_deal          0
         aman_deal            0
         namita_deal          0
         vineeta_deal         0
         peyush_deal          0
         ghazal_deal          0
         total_sharks_invested 0
         amount_per_shark     0
         equity_per_shark     0
         dtype: int64

```

```
In [12]: df.shape
```

```
Out[12]: (117, 28)
```

```
In [13]: df.describe()
```

```

Out[13]:

```

	episode_number	pitch_number	deal	pitcher_ask_amount	ask_equ
<b>count</b>	117.000000	117.000000	117.000000	117.000000	117.0000
<b>mean</b>	18.735043	59.000000	0.555556	319.854709	5.1880
<b>std</b>	10.070778	33.919021	0.499041	2767.842777	3.8920
<b>min</b>	1.000000	1.000000	0.000000	0.001010	0.2500
<b>25%</b>	10.000000	30.000000	0.000000	45.000000	2.5000
<b>50%</b>	19.000000	59.000000	1.000000	50.000000	5.0000
<b>75%</b>	27.000000	88.000000	1.000000	80.000000	7.5000
<b>max</b>	35.000000	117.000000	1.000000	30000.000000	25.0000

# Exploratory Data Analysis (EDA)

## How many deals done in the whole season

```
In [16]: done=df[df['deal']==1].count()[0]
print('Succesfull deals....',done)
not_done=df[df['deal']==0].count()[0]
print('Rejected deals....',not_done)
```

```
Succesfull deals.... 65
Rejected deals.... 52
```

```
In [17]: deal=df['deal'].value_counts().values[0]
no_deal=df['deal'].value_counts().values[1]
```

```
In [12]: df['deal'].value_counts().index
```

```
Out[12]: Index([1, 0], dtype='int64', name='deal')
```

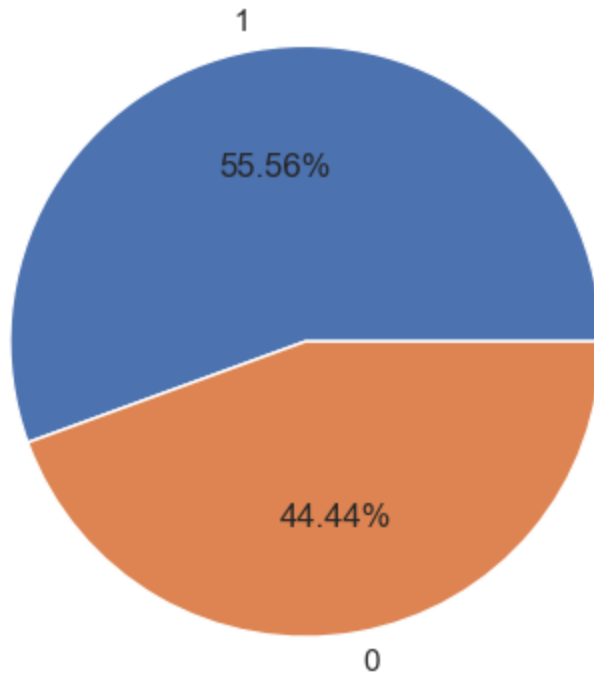
```
In [ ]:
```

```
In [10]: df['deal'].value_counts(normalize=True)
```

```
Out[10]: deal
1      0.555556
0      0.444444
Name: proportion, dtype: float64
```

```
In [14]: v=df['deal'].value_counts().values
i=df['deal'].value_counts().index
```

```
In [19]: plt.pie(v,labels=i,autopct='%.2f%%');
```



```
In [ ]: print('hello')
```

```
In [16]: df['deal'].value_counts().values[0]
```

```
Out[16]: 65
```

```
In [17]: df['deal'].value_counts(normalize=True)*100
```

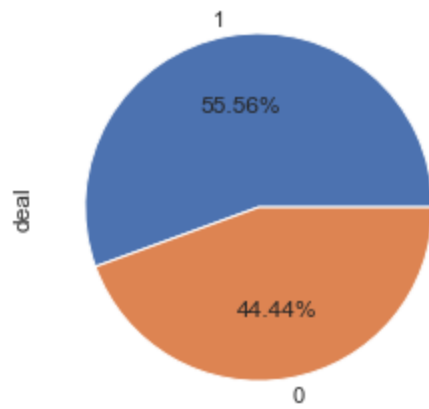
```
Out[17]: 1    55.555556
         0    44.444444
         Name: deal, dtype: float64
```

```
In [22]: d=df['deal'].value_counts().values[0]
         nd=df['deal'].value_counts().values[1]
         print('Succesfull deals....',d)
         print('UnSuccesfull deals....',nd)
```

```
Succesfull deals.... 65
UnSuccesfull deals.... 52
```

```
In [15]: df['deal'].value_counts().plot(autopct='%.2f%%',kind='pie')
```

```
Out[15]: <AxesSubplot:ylabel='deal'>
```



Deals percentages

## Most Dealing Episode

```
In [21]: best_episodes=df.groupby(['episode_number'])['deal'].sum().sort_values(ascending=True)
best_episodes
```

Out[21]:

	episode_number	deal
<b>0</b>	1	3
<b>1</b>	15	3
<b>2</b>	21	3
<b>3</b>	33	3
<b>4</b>	8	3
<b>5</b>	10	3
<b>6</b>	17	3
<b>7</b>	16	3
<b>8</b>	13	3
<b>9</b>	25	2
<b>10</b>	24	2
<b>11</b>	28	2
<b>12</b>	20	2
<b>13</b>	26	2
<b>14</b>	27	2
<b>15</b>	12	2
<b>16</b>	11	2
<b>17</b>	9	2
<b>18</b>	6	2
<b>19</b>	4	2
<b>20</b>	3	2
<b>21</b>	31	1
<b>22</b>	30	1
<b>23</b>	29	1
<b>24</b>	34	1
<b>25</b>	32	1
<b>26</b>	18	1
<b>27</b>	23	1
<b>28</b>	22	1
<b>29</b>	19	1
<b>30</b>	2	1



	episode_number	deal
<b>31</b>	14	1
<b>32</b>	7	1
<b>33</b>	5	1
<b>34</b>	35	1

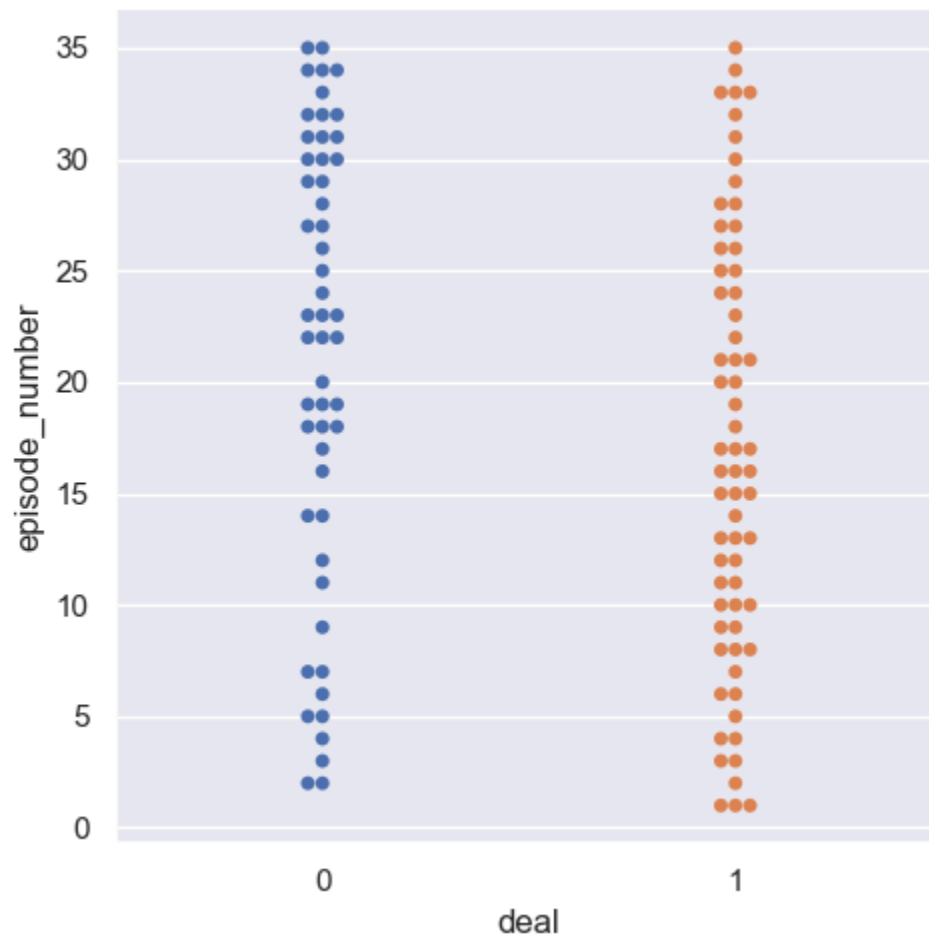
```
In [15]: sns.set(style='darkgrid')
```

```
In [11]: df['episode_number'].value_counts()
```

```
Out[11]: 18    4
        30    4
        17    4
        16    4
        22    4
        23    4
        27    4
        31    4
        32    4
        33    4
        34    4
        19    4
        29    3
        28    3
        20    3
        26    3
        25    3
        24    3
        21    3
         1    3
         2    3
        15    3
        14    3
        13    3
        12    3
        11    3
        10    3
         9    3
         8    3
         7    3
         6    3
         5    3
         4    3
         3    3
        35    3
        Name: episode_number, dtype: int64
```

```
In [16]: sns.catplot(x = 'deal', y = 'episode_number', kind='swarm', hue='deal', data = d
```

Out[16]: <seaborn.axisgrid.FacetGrid at 0x285b665f280>



## Most Expensive dealing Episodes

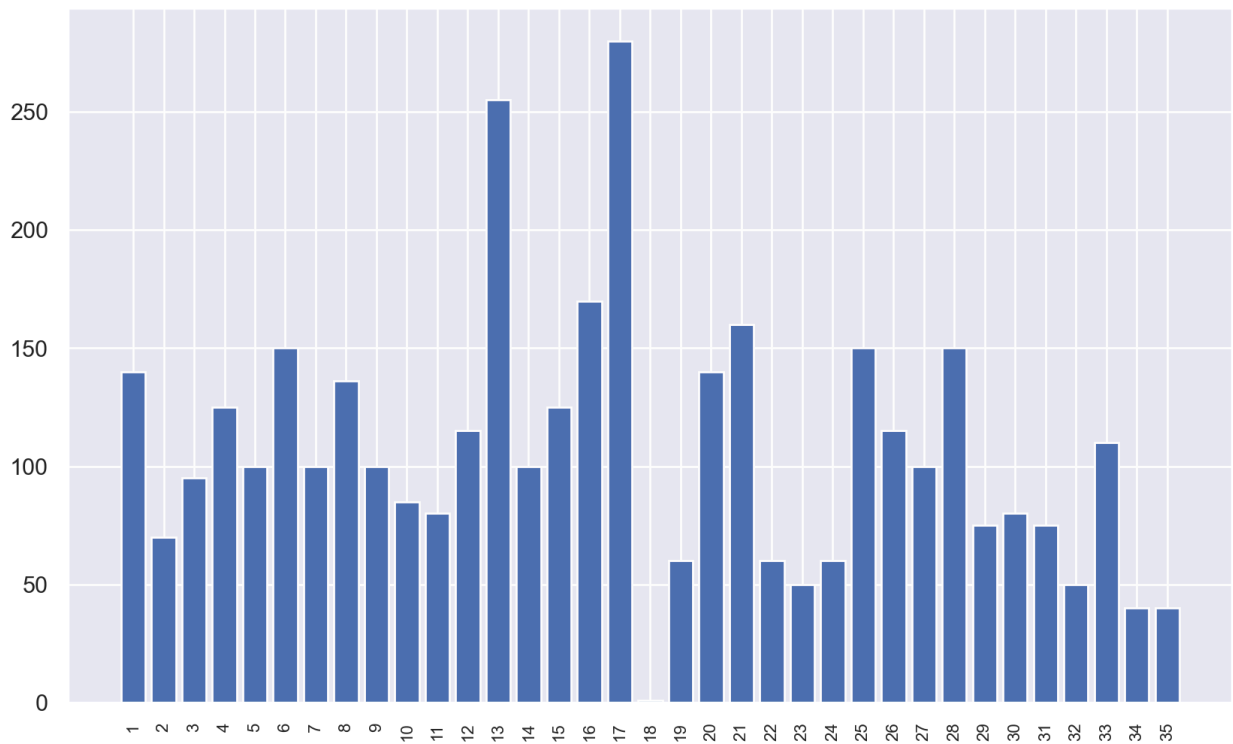
```
In [17]: A=df.groupby(df['episode_number'])['deal_amount'].sum().sort_values(ascending=A
```

Out[17]:

	<b>episode_number</b>	<b>deal_amount</b>
<b>0</b>	17	280.00000
<b>1</b>	13	255.00000
<b>2</b>	16	170.00000
<b>3</b>	21	160.00000
<b>4</b>	28	150.00000
<b>5</b>	25	150.00000
<b>6</b>	6	150.00000
<b>7</b>	20	140.00000
<b>8</b>	1	140.00000
<b>9</b>	8	136.00000
<b>10</b>	15	125.00005
<b>11</b>	4	125.00000
<b>12</b>	12	115.00000
<b>13</b>	26	115.00000
<b>14</b>	33	110.00000
<b>15</b>	27	100.00101
<b>16</b>	9	100.00000
<b>17</b>	14	100.00000
<b>18</b>	7	100.00000
<b>19</b>	5	100.00000
<b>20</b>	3	95.00000
<b>21</b>	10	85.00000
<b>22</b>	11	80.00000
<b>23</b>	30	80.00000
<b>24</b>	29	75.00000
<b>25</b>	31	75.00000
<b>26</b>	2	70.00000
<b>27</b>	24	60.00000
<b>28</b>	19	60.00000
<b>29</b>	22	60.00000
<b>30</b>	23	50.00000

	episode_number	deal_amount
31	32	50.00000
32	34	40.00000
33	35	40.00000
34	18	1.00000

```
In [20]: plt.figure(figsize=(10,6),dpi=200)
plt.bar(A['episode_number'],A['deal_amount'])
plt.xticks(A['episode_number'],rotation=90,fontsize=8)
plt.show()
```



## All Sharks in

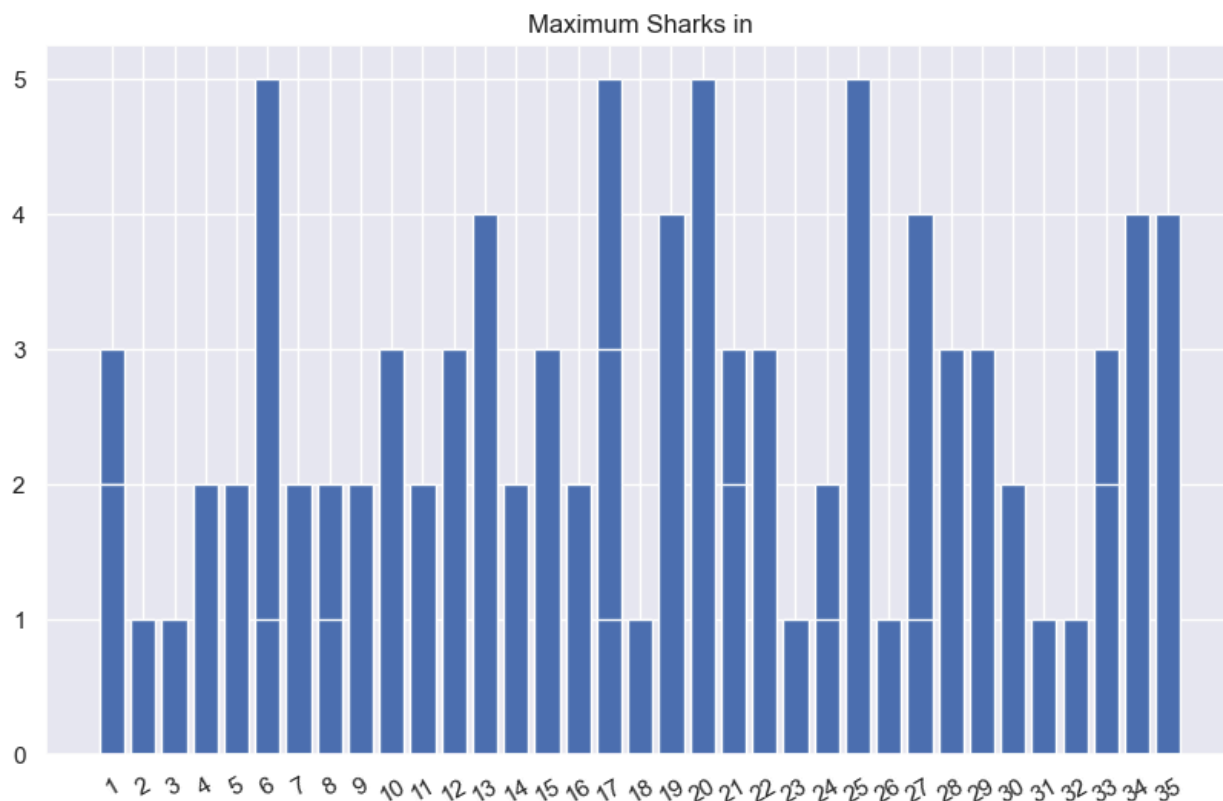
```
In [26]: df[df['total_sharks_invested']==5]
```

Out[26]:	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_am
<b>15</b>	6	16	Skippi Pops	Ice-Pops	1	
<b>49</b>	17	50	Find Your Kicks India	Sneaker Resale	1	
<b>63</b>	20	64	IN A CAN	Can Cocktails	1	
<b>79</b>	25	80	Sunfox Technologies	Portable ECG Device	1	

```
In [29]: df['total_sharks_invested'].value_counts()
```

```
Out[29]: 0    52
         1    22
         2    20
         3    14
         4     5
         5     4
         Name: total_sharks_invested, dtype: int64
```

```
In [29]: plt.figure(figsize=(10,6))
         plt.title('Maximum Sharks in')
         plt.bar(df['episode_number'],df['total_sharks_invested'])
         plt.xticks(df['episode_number'].unique(),rotation=30);
```



```
In [19]: df[df['total_sharks_invested']==5]
```

```
Out[19]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_am
<b>15</b>	6	16	Skippi Pops	Ice-Pops	1	
<b>49</b>	17	50	Find Your Kicks India	Sneaker Resale	1	
<b>63</b>	20	64	IN A CAN	Can Cocktails	1	
<b>79</b>	25	80	Sunfox Technologies	Portable ECG Device	1	

```
In [ ]: df.columns
```

## No Bargain Deal

```
In [31]: df[(df['pitcher_ask_amount']==df['deal_amount']) & (df['ask_equity']==df['deal
```

```
Out[31]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amo
<b>21</b>	8	22	Beyond Snack	Kerala Banana Chips	1	

## No of Sharks invested with respect to Business

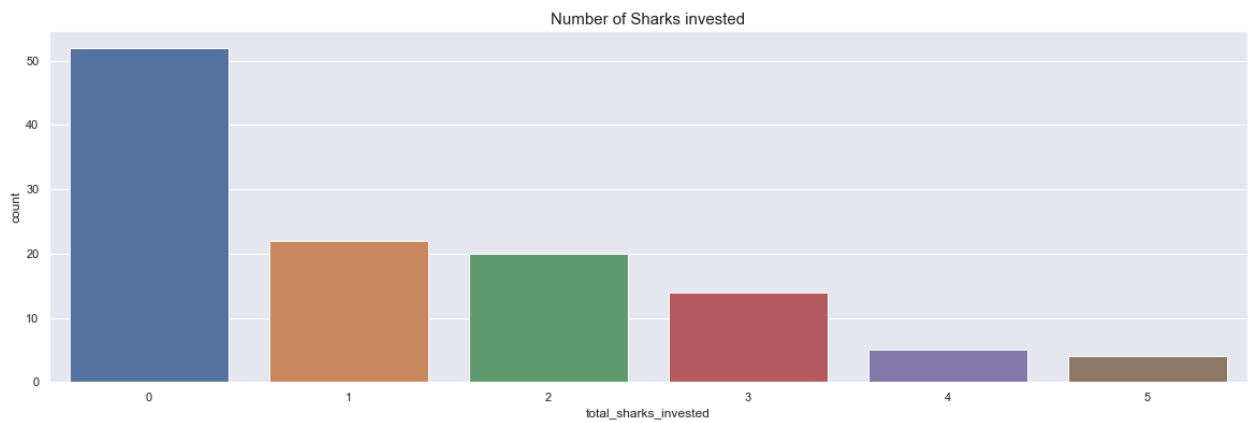
```
In [32]: df['total_sharks_invested'].value_counts()
```

```
Out[32]:
```

0	52
1	22
2	20
3	14
4	5
5	4

Name: total\_sharks\_invested, dtype: int64

```
In [21]: plt.figure(figsize =(20, 6))
sns.countplot(x=df['total_sharks_invested'])
plt.title('Number of Sharks invested', fontsize = 15)
plt.show()
```



```
In [15]: df.head(1)
```

```
Out[15]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amo
0	1	1	BluePine Industries	Frozen Momos	1	50

```
In [ ]:
```

```
In [ ]:
```

Created a function that show the Equity and Amount per shark

```
In [6]: def sharks(data):
list= ['anupam_deal','aman_deal','namita_deal','vineeta_deal','peyush_deal']
for i in list:
    deal = data[['amount_per_shark','equity_per_shark']][data[i]==1]
    # print("{} deals with {}".format(len(deal),i[:-5]))
    print('\n',len(deal),'deals with',i[:-5])
    print(deal)
```

```
In [27]: a=df[(df['ashneer_deal']==1) & (df['anupam_deal']==1)]
len(a[['amount_per_shark','equity_per_shark']])
```

```
Out[27]: 8
```

```
In [29]: a[['amount_per_shark','equity_per_shark']]
```

Out[29]:

	amount_per_shark	equity_per_shark
--	------------------	------------------

<b>15</b>	20.0	3.000000
<b>38</b>	25.0	2.500000
<b>45</b>	25.0	1.750000
<b>49</b>	10.0	5.000000
<b>63</b>	20.0	2.000000
<b>67</b>	20.0	1.333333
<b>108</b>	20.0	3.333333
<b>114</b>	10.0	7.500000

In [32]: `df[(df['ashneer_deal']==1) & (df['anupam_deal']==1)][['amount_per_shark', 'equity_per_shark']]`  
`# len(df[(df['ashneer_deal']==1) & (df['aman_deal']==1)][['amount_per_shark', 'equity_per_shark']])`

In [23]: `ash_grover[['amount_per_shark', 'equity_per_shark']][ash_grover['anupam_deal']==1]`

Out[23]:

	amount_per_shark	equity_per_shark
--	------------------	------------------

<b>15</b>	20.0	3.000000
<b>38</b>	25.0	2.500000
<b>45</b>	25.0	1.750000
<b>49</b>	10.0	5.000000
<b>63</b>	20.0	2.000000
<b>67</b>	20.0	1.333333
<b>108</b>	20.0	3.333333
<b>114</b>	10.0	7.500000

In [16]: `ash_grover[['amount_per_shark', 'equity_per_shark']][ash_grover['anupam_deal']==1]`



Out[16]:

	amount_per_shark	equity_per_shark
15	20.0	3.000000
38	25.0	2.500000
45	25.0	1.750000
49	10.0	5.000000
63	20.0	2.000000
67	20.0	1.333333
108	20.0	3.333333
114	10.0	7.500000

	amount_per_shark	equity_per_shark
15	20.0	3.000000
38	25.0	2.500000
45	25.0	1.750000
49	10.0	5.000000
63	20.0	2.000000
67	20.0	1.333333
108	20.0	3.333333
114	10.0	7.500000

In [ ]: ash\_grover

## Ashneer Deals

In [13]: ash\_grover = df[df['ashneer\_deal']==1]  
ash\_grover

Out[13]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_as
<b>0</b>	1	1	BluePine Industries	Frozen Momos	1	
<b>1</b>	1	2	Booz scooters	Renting e-bike for mobility in private spaces	1	
<b>3</b>	2	4	Tagz Foods	Healthy Potato Chips	1	
<b>15</b>	6	16	Skippi Pops	Ice-Pops	1	
<b>18</b>	7	19	Raising Superstars	Child Development App	0	
<b>21</b>	8	22	Beyond Snack	Kerala Banana Chips	1	
<b>23</b>	8	24	Motion Breeze	Smart Electric Motorcycle	1	
<b>29</b>	10	30	EventBeep	Student Community App	1	
<b>38</b>	13	39	The Yarn Bazaar	Yarn-Trading App	1	
<b>45</b>	16	46	Bamboo India	Bamboo Products	1	
<b>49</b>	17	50	Find Your Kicks India	Sneaker Resale	1	
<b>50</b>	17	51	Aas Vidyalaya	EdTech App	1	
<b>55</b>	18	56	Otua	Electric Auto Vehicle	1	
<b>58</b>	19	59	WeSTOCK	Livestock health monitoring AI	1	
<b>63</b>	20	64	IN A CAN	Can Cocktails	1	
<b>64</b>	21	65	Get a Whey	Sugar-Free Icecream	1	
<b>67</b>	22	68	Hair Originals	Natural Hair Extensions	1	

	episode_number	pitch_number	brand_name	idea	deal	pitcher_as
<b>108</b>	33	109	Tweek Labs	Sportswear	1	
<b>109</b>	33	110	Proxgy	VR	1	
<b>110</b>	34	111	Nomad Food Project	Bacon Jams	1	
<b>114</b>	35	115	Jain Shikanji	Lemonade	1	

In [37]: sharks(ash\_grover)

8 deals with anupam		
	amount_per_shark	equity_per_shark
15	20.0	3.000000
38	25.0	2.500000
45	25.0	1.750000
49	10.0	5.000000
63	20.0	2.000000
67	20.0	1.333333
108	20.0	3.333333
114	10.0	7.500000

11 deals with aman		
	amount_per_shark	equity_per_shark
0	25.000000	5.333333
15	20.000000	3.000000
18	50.000000	2.000000
21	25.000000	1.250000
29	10.000000	1.000000
38	25.000000	2.500000
49	10.000000	5.000000
58	15.000000	2.500000
63	20.000000	2.000000
64	33.333333	5.000000
114	10.000000	7.500000

6 deals with namita		
	amount_per_shark	equity_per_shark
15	20.0	3.0
49	10.0	5.0
50	50.0	5.0
58	15.0	2.5
63	20.0	2.0
110	10.0	5.0

6 deals with vineeta		
	amount_per_shark	equity_per_shark
0	25.000000	5.333333
1	20.000000	25.000000
15	20.000000	3.000000
64	33.333333	5.000000
110	10.000000	5.000000
114	10.000000	7.500000

9 deals with peyush		
	amount_per_shark	equity_per_shark
29	10.0	1.000000
38	25.0	2.500000
49	10.0	5.000000
50	50.0	5.000000
58	15.0	2.500000
63	20.0	2.000000
67	20.0	1.333333
108	20.0	3.333333
109	5.0	5.000000

```

1 deals with ghazal
  amount_per_shark equity_per_shark
110              10.0              5.0

```

```

21 deals with ashneer
  amount_per_shark equity_per_shark
0              25.000000              5.333333
1              20.000000             25.000000
3              70.000000              2.750000
15             20.000000              3.000000
18             50.000000              2.000000
21             25.000000              1.250000
23             30.000000              6.000000
29             10.000000              1.000000
38             25.000000              2.500000
45             25.000000              1.750000
49             10.000000              5.000000
50             50.000000              5.000000
55              1.000000              1.000000
58             15.000000              2.500000
63             20.000000              2.000000
64             33.333333              5.000000
67             20.000000              1.333333
108            20.000000              3.333333
109              5.000000              5.000000
110            10.000000              5.000000
114            10.000000              7.500000

```

In [38]: df

Out[38]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_as
<b>0</b>	1	1	BluePine Industries	Frozen Momos	1	
<b>1</b>	1	2	Booz scooters	Renting e-bike for mobility in private spaces	1	
<b>2</b>	1	3	Heart up my Sleeves	Detachable Sleeves	1	
<b>3</b>	2	4	Tagz Foods	Healthy Potato Chips	1	
<b>4</b>	2	5	Head and Heart	Brain Development Course	0	
...	...	...	...	...	...	...
<b>112</b>	34	113	Green Protein	Plant-Based Protein	0	
<b>113</b>	34	114	On2Cook	Fastest Cooking Device	0	
<b>114</b>	35	115	Jain Shikanji	Lemonade	1	
<b>115</b>	35	116	Woloo	Washroom Finder	0	
<b>116</b>	35	117	Elcare India	Carenting for Elders	0	

117 rows × 28 columns

```
In [21]: amt=ash_grover['amount_per_shark'].sum()
print("Total amount invested on shark tank by Ashneer",amt,"lakhs")
```

Total amount invested on shark tank by Ashneer 494.33333333 lakhs

```
In [15]: eqt=ash_grover['equity_per_shark'].sum()
print("Total equity buy on shark tank by Ashneer",eqt,'%')
```

Total equity buy on shark tank by Ashneer 93.249999999 %

```
In [34]: ash_grover[ash_grover['equity_per_shark']==ash_grover['equity_per_shark'].max(
```

```
Out[34]:
```

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amou
1	1	Booz scooters	Renting e-bike for mobility in private spaces	1	4

```
In [ ]:
```

```
In [ ]:
```

```
In [40]: eqt = df.groupby('ashneer_deal')['equity_per_shark'].sum()[1]
amt = df.groupby('ashneer_deal')['amount_per_shark'].sum()[1]
print("Total equity buy on shark tank by Ashneer",eqt,'%')
print("Total amount invested on shark tank by Ashneer",amt,"lakhs")
```

Total equity buy on shark tank by Ashneer 93.249999999 %  
Total amount invested on shark tank by Ashneer 494.33333333 lakhs

```
In [34]: ash_grover['amount_per_shark'].sum()
```

```
Out[34]: 494.33333333
```

```
In [78]: ash_grover['amount_per_shark'].max()
```

```
Out[78]: 70.0
```

```
In [16]: # ash_grover[ash_grover['amount_per_shark']==70.0]
```

```
Out[16]:
```

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amou
3	2	Tagz Foods	Healthy Potato Chips	1	70

1 rows x 28 columns

```
In [24]: ash_grover.sort_values(by='amount_per_shark',ascending=False).head(1)
```

```
Out[24]:
```

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amou
3	2	Tagz Foods	Healthy Potato Chips	1	70

```
In [25]: ash_grover['amount_per_shark'].max()
```

```
Out[25]: 70.0
```

```
In [46]: ash_grover[ash_grover['amount_per_shark']==ash_grover['amount_per_shark'].max(
```

```
Out[46]:
```

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amou	
3	2	4	Tagz Foods	Healthy Potato Chips	1	70

```
In [43]: ash_grover[ash_grover['equity_per_shark']==ash_grover['equity_per_shark'].max(
```

```
Out[43]:
```

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amou	
1	1	2	Booz scooters	Renting e-bike for mobility in private spaces	1	4

## Anupam Deals

```
In [38]: anupam = df[df['anupam_deal']==1]  
anupam
```



Out[38]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask
<b>2</b>	1	3	Heart up my Sleeves	Detachable Sleeves	1	
<b>9</b>	4	10	Cosiq	Intelligent Skincare	1	
<b>12</b>	5	13	Revamp Moto	E-Bike	1	1
<b>15</b>	6	16	Skippi Pops	Ice-Pops	1	
<b>22</b>	8	23	Vivalyf Innovations-Easy Life	Prickless Diabetes Testing Machine	1	
<b>28</b>	10	29	Meatyour	Eggs	1	
<b>31</b>	11	32	ARRCOAT Surface Textures	Wall Building	1	
<b>35</b>	12	36	LOKA	Metaverse App	1	
<b>36</b>	13	37	Annie	Braille Literary Device	1	
<b>37</b>	13	38	Caragreen	Eco-Friendly boxes	1	
<b>38</b>	13	39	The Yarn Bazaar	Yarn-Trading App	1	
<b>44</b>	15	45	Cocofit	Coconut based beverage franchise	1	
<b>45</b>	16	46	Bamboo India	Bamboo Products	1	
<b>48</b>	16	49	Let's Try	Healthy Snacks	1	
<b>49</b>	17	50	Find Your Kicks India	Sneaker Resale	1	
<b>63</b>	20	64	IN A CAN	Can Cocktails	1	
<b>66</b>	21	67	The Quirky Nari	Customised Apparels	1	
<b>67</b>	22	68	Hair Originals	Natural Hair Extensions	1	

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask
<b>75</b>	24	76	The Sass Bar	Gifts	1	
<b>78</b>	25	79	PawsIndia	Dog Products	1	
<b>79</b>	25	80	Sunfox Technologies	Portable ECG Device	1	1
<b>85</b>	27	86	Watt Technovations	Ventilated PPE Kits	1	
<b>108</b>	33	109	Tweek Labs	Sportswear	1	
<b>114</b>	35	115	Jain Shikanji	Lemonade	1	

In [11]: sharks(anupam)

24 deals with anupam		
	amount_per_shark	equity_per_shark
2	12.500000	15.000000
9	25.000000	12.500000
12	50.000000	0.750000
15	20.000000	3.000000
22	28.000000	16.650000
28	10.000000	6.666667
31	50.000000	15.000000
35	13.333333	8.000000
36	35.000000	1.000000
37	25.000000	10.000000
38	25.000000	2.500000
44	0.000017	1.666667
45	25.000000	1.750000
48	22.500000	6.000000
49	10.000000	5.000000
63	20.000000	2.000000
66	17.500000	12.000000
67	20.000000	1.333333
75	25.000000	17.500000
78	50.000000	15.000000
79	20.000000	1.200000
85	0.000253	1.000000
108	20.000000	3.333333
114	10.000000	7.500000

10 deals with aman		
	amount_per_shark	equity_per_shark
12	50.000000	0.750000
15	20.000000	3.000000
28	10.000000	6.666667
35	13.333333	8.000000
38	25.000000	2.500000
44	0.000017	1.666667
48	22.500000	6.000000
49	10.000000	5.000000
63	20.000000	2.000000
114	10.000000	7.500000

7 deals with namita		
	amount_per_shark	equity_per_shark
15	20.000000	3.000000
36	35.000000	1.000000
44	0.000017	1.666667
49	10.000000	5.000000
63	20.000000	2.000000
79	20.000000	1.200000
85	0.000253	1.000000

6 deals with vineeta		
	amount_per_shark	equity_per_shark
2	12.5	15.0
9	25.0	12.5

15	20.0	3.0
66	17.5	12.0
79	20.0	1.2
114	10.0	7.5

12 deals with peyush

	amount_per_shark	equity_per_shark
22	28.000000	16.650000
28	10.000000	6.666667
35	13.333333	8.000000
36	35.000000	1.000000
37	25.000000	10.000000
38	25.000000	2.500000
49	10.000000	5.000000
63	20.000000	2.000000
67	20.000000	1.333333
79	20.000000	1.200000
85	0.000253	1.000000
108	20.000000	3.333333

3 deals with ghazal

	amount_per_shark	equity_per_shark
75	25.000000	17.5
79	20.000000	1.2
85	0.000253	1.0

8 deals with ashneer

	amount_per_shark	equity_per_shark
15	20.0	3.000000
38	25.0	2.500000
45	25.0	1.750000
49	10.0	5.000000
63	20.0	2.000000
67	20.0	1.333333
108	20.0	3.333333
114	10.0	7.500000

```
In [37]: eqt = df.groupby('anupam_deal')['equity_per_shark'].sum()[1]
amt = df.groupby('anupam_deal')['amount_per_shark'].sum()[1]
print("Total equity buy on shark tank by Anupam",eqt,'%')
print("Total amount invested on shark tank by Anupam",amt,"lakhs")
```

Total equity buy on shark tank by Anupam 166.35 %  
Total amount invested on shark tank by Anupam 533.83360253 lakhs

```
In [39]: anupam['amount_per_shark'].sum()
```

Out[39]: 533.83360253

```
In [40]: anupam['equity_per_shark'].sum()
```

Out[40]: 166.35

```
In [25]: anupam[anupam['amount_per_shark']==anupam['amount_per_shark'].max()]
```

```
Out[25]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_am
<b>12</b>	5	13	Revamp Moto	E-Bike	1	1
<b>31</b>	11	32	ARRCOAT Surface Textures	Wall Building	1	
<b>78</b>	25	79	PawsIndia	Dog Products	1	

```
In [88]: anupam[anupam['equity_per_shark']==anupam['equity_per_shark'].max()]
```

```
Out[88]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_ammoun
<b>75</b>	24	76	The Sass Bar	Gifts	1	40.

## Aman Deals

```
In [41]: aman = df[df['aman_deal']==1]  
aman
```

Out[41]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_as
<b>0</b>	1	1	BluePine Industries	Frozen Momos	1	
<b>7</b>	3	8	Peeschute	Disposable Urine Bag	1	
<b>11</b>	4	12	Bummer	Underwear	1	
<b>12</b>	5	13	Revamp Moto	E-Bike	1	
<b>15</b>	6	16	Skippi Pops	Ice-Pops	1	
<b>18</b>	7	19	Raising Superstars	Child Development App	0	
<b>21</b>	8	22	Beyond Snack	Kerala Banana Chips	1	
<b>24</b>	9	25	Altor	Smart Helmets	1	
<b>25</b>	9	26	Ariro	Wooden Toys	1	
<b>27</b>	10	28	Nuutjob	Male Intimate Hygiene	1	
<b>28</b>	10	29	Meatyour	Eggs	1	
<b>29</b>	10	30	EventBeep	Student Community App	1	
<b>32</b>	11	33	Farda	Customised Streetwear	1	
<b>35</b>	12	36	LOKA	Metaverse App	1	
<b>38</b>	13	39	The Yarn Bazaar	Yarn-Trading App	1	
<b>39</b>	14	40	The Renal Project	Home Dialysis Treatment	1	
<b>42</b>	15	43	Hammer Lifestyle	Smart Audio Products	1	
<b>44</b>	15	45	Cocofit	Coconut based beverage franchise	1	
<b>47</b>	16	48	Beyond Water	Liquid Water Enhancer	1	
<b>48</b>	16	49	Let's Try	Healthy	1	

episode_number	pitch_number	brand_name	idea	deal	pitcher_as
			Snacks		
<b>49</b>	17	50	Find Your Kicks India	Sneaker Resale	1
<b>58</b>	19	59	WeSTOCK	Livestock health monitoring AI	1
<b>63</b>	20	64	IN A CAN	Can Cocktails	1
<b>64</b>	21	65	Get a Whey	Sugar-Free Icecream	1
<b>71</b>	23	72	Namhya Foods	Ayurvedic Enriched Food	1
<b>100</b>	31	101	AyuRythm	Ayurvedic Wellness App	1
<b>104</b>	32	105	GrowFitter	Rewards App	1
<b>114</b>	35	115	Jain Shikanji	Lemonade	1

In [ ]:

In [49]:

sharks(aman)

10 deals with anupam		
	amount_per_shark	equity_per_shark
12	50.000000	0.750000
15	20.000000	3.000000
28	10.000000	6.666667
35	13.333333	8.000000
38	25.000000	2.500000
44	0.000017	1.666667
48	22.500000	6.000000
49	10.000000	5.000000
63	20.000000	2.000000
114	10.000000	7.500000

27 deals with aman		
	amount_per_shark	equity_per_shark
0	25.000000	5.333333
7	75.000000	6.000000
11	37.500000	3.750000
12	50.000000	0.750000
15	20.000000	3.000000
21	25.000000	1.250000
24	25.000000	3.500000
25	25.000000	5.000000
27	8.333333	6.666667
28	10.000000	6.666667
29	10.000000	1.000000
32	15.000000	10.000000
35	13.333333	8.000000
38	25.000000	2.500000
39	50.000000	3.000000
42	100.000000	40.000000
44	0.000017	1.666667
47	37.500000	7.500000
48	22.500000	6.000000
49	10.000000	5.000000
58	15.000000	2.500000
63	20.000000	2.000000
64	33.333333	5.000000
71	50.000000	10.000000
100	75.000000	2.680000
104	50.000000	2.000000
114	10.000000	7.500000

11 deals with namita		
	amount_per_shark	equity_per_shark
11	37.500000	3.750000
15	20.000000	3.000000
24	25.000000	3.500000
27	8.333333	6.666667
32	15.000000	10.000000
39	50.000000	3.000000
44	0.000017	1.666667
47	37.500000	7.500000
49	10.000000	5.000000



58	15.000000	2.500000
63	20.000000	2.000000

4 deals with vineeta

	amount_per_shark	equity_per_shark
0	25.000000	5.333333
15	20.000000	3.000000
64	33.333333	5.000000
114	10.000000	7.500000

9 deals with peyush

	amount_per_shark	equity_per_shark
25	25.000000	5.000000
27	8.333333	6.666667
28	10.000000	6.666667
29	10.000000	1.000000
35	13.333333	8.000000
38	25.000000	2.500000
49	10.000000	5.000000
58	15.000000	2.500000
63	20.000000	2.000000

0 deals with ghazal  
Empty DataFrame  
Columns: [amount\_per\_shark, equity\_per\_shark]  
Index: []

10 deals with ashneer

	amount_per_shark	equity_per_shark
0	25.000000	5.333333
15	20.000000	3.000000
21	25.000000	1.250000
29	10.000000	1.000000
38	25.000000	2.500000
49	10.000000	5.000000
58	15.000000	2.500000
63	20.000000	2.000000
64	33.333333	5.000000
114	10.000000	7.500000

```
In [92]: eqt = df.groupby('aman_deal')['equity_per_shark'].sum()[1]
amt = df.groupby('aman_deal')['amount_per_shark'].sum()[1]
print("Total equity buy on shark tank by Aman",eqt,'%')
print("Total amount invested on shark tank by Aman",amt,"lakhs")
```

Total equity buy on shark tank by Aman 160.2633333334 %  
Total amount invested on shark tank by Aman 887.5000166929999 lakhs

```
In [42]: aman['amount_per_shark'].sum()
```

Out[42]: 887.500016693

```
In [43]: aman['equity_per_shark'].sum()
```

Out[43]: 160.263333334

```
In [93]: aman[aman['amount_per_shark']==aman['amount_per_shark'].max()]
```

```
Out[93]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_am
42	15	43	Hammer Lifestyle	Smart Audio Products	1	

```
In [94]: aman[aman['deal_equity']==aman['deal_equity'].max()]
```

```
Out[94]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_am
42	15	43	Hammer Lifestyle	Smart Audio Products	1	

## Namita Deals

```
In [50]: namita = df[df['namita_deal']==1]
namita
```

Out[50]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask
<b>11</b>	4	12	Bummer	Underwear	1	
<b>15</b>	6	16	Skippi Pops	Ice-Pops	1	
<b>16</b>	6	17	Menstrupedia	Menstrual Awareness Comic	1	
<b>24</b>	9	25	Altor	Smart Helmets	1	
<b>27</b>	10	28	Nuutjob	Male Intimate Hygiene	1	
<b>32</b>	11	33	Farda	Customised Streetwear	1	
<b>33</b>	12	34	Auli Lifestyle	Ayurvedic Products	1	
<b>36</b>	13	37	Annie	Braille Literary Device	1	
<b>39</b>	14	40	The Renal Project	Home Dialysis Treatment	1	1
<b>44</b>	15	45	Cocofit	Coconut based beverage franchise	1	
<b>47</b>	16	48	Beyond Water	Liquid Water Enhancer	1	
<b>49</b>	17	50	Find Your Kicks India	Sneaker Resale	1	
<b>50</b>	17	51	Aas Vidyalaya	EdTech App	1	1
<b>58</b>	19	59	WeSTOCK	Livestock health monitoring AI	1	
<b>63</b>	20	64	IN A CAN	Can Cocktails	1	
<b>79</b>	25	80	Sunfox Technologies	Portable ECG Device	1	1
<b>83</b>	26	84	Rare Planet	Handicrafts	1	
<b>85</b>	27	86	Watt Technovations	Ventilated PPE Kits	1	
<b>91</b>	29	92	Wakao Foods	Jackfruit	1	

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask
Products					
<b>95</b>	30	96 Kabaddi Adda	All-Kabaddi App	1	
<b>106</b>	33	107 Colour Me Mad	Insoles	1	
<b>110</b>	34	111 Nomad Food Project	Bacon Jams	1	

In [51]: sharks(namita)

7 deals with anupam

	amount_per_shark	equity_per_shark
15	20.000000	3.000000
36	35.000000	1.000000
44	0.000017	1.666667
49	10.000000	5.000000
63	20.000000	2.000000
79	20.000000	1.200000
85	0.000253	1.000000

11 deals with aman

	amount_per_shark	equity_per_shark
11	37.500000	3.750000
15	20.000000	3.000000
24	25.000000	3.500000
27	8.333333	6.666667
32	15.000000	10.000000
39	50.000000	3.000000
44	0.000017	1.666667
47	37.500000	7.500000
49	10.000000	5.000000
58	15.000000	2.500000
63	20.000000	2.000000

22 deals with namita

	amount_per_shark	equity_per_shark
11	37.500000	3.750000
15	20.000000	3.000000
16	50.000000	20.000000
24	25.000000	3.500000
27	8.333333	6.666667
32	15.000000	10.000000
33	75.000000	15.000000
36	35.000000	1.000000
39	50.000000	3.000000
44	0.000017	1.666667
47	37.500000	7.500000
49	10.000000	5.000000
50	50.000000	5.000000
58	15.000000	2.500000
63	20.000000	2.000000
79	20.000000	1.200000
83	65.000000	3.000000
85	0.000253	1.000000
91	25.000000	7.000000
95	40.000000	3.000000
106	40.000000	25.000000
110	10.000000	5.000000

5 deals with vineeta

	amount_per_shark	equity_per_shark
15	20.0	3.0
79	20.0	1.2
91	25.0	7.0

95	40.0	3.0
110	10.0	5.0

8 deals with peyush

	amount_per_shark	equity_per_shark
27	8.333333	6.666667
36	35.000000	1.000000
49	10.000000	5.000000
50	50.000000	5.000000
58	15.000000	2.500000
63	20.000000	2.000000
79	20.000000	1.200000
85	0.000253	1.000000

4 deals with ghazal

	amount_per_shark	equity_per_shark
79	20.000000	1.2
85	0.000253	1.0
91	25.000000	7.0
110	10.000000	5.0

6 deals with ashneer

	amount_per_shark	equity_per_shark
15	20.0	3.0
49	10.0	5.0
50	50.0	5.0
58	15.0	2.5
63	20.0	2.0
110	10.0	5.0

```
In [98]: eqt = df.groupby('namita_deal')['equity_per_shark'].sum()[1]
amt = df.groupby('namita_deal')['amount_per_shark'].sum()[1]
print("Total equity buy on shark tank by namita",eqt,'%')
print("Total amount invested on shark tank by namita",amt,"lakhs")
```

Total equity buy on shark tank by namita 134.78333333400002 %  
Total amount invested on shark tank by namita 648.333602533 lakhs

```
In [99]: namita[namita['amount_per_shark']==namita['amount_per_shark'].max()]
```

```
Out[99]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_an
<b>33</b>	12	34	Auli Lifestyle	Ayurvedic Products	1	

```
In [28]: namita[namita['equity_per_shark']==namita['equity_per_shark'].max()]
```

```
Out[28]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_am
<b>106</b>	33	107	Colour Me Mad	Insoles	1	

# Vineeta Deals

```
In [52]: vineeta = df[df['vineeta_deal']==1]
vineeta
```

```
Out[52]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask
<b>0</b>	1	1	BluePine Industries	Frozen Momos	1	
<b>1</b>	1	2	Booz scooters	Renting e-bike for mobility in private spaces	1	
<b>2</b>	1	3	Heart up my Sleeves	Detachable Sleeves	1	
<b>8</b>	3	9	NOCD	Energy Drink	1	
<b>9</b>	4	10	Cosiq	Intelligent Skincare	1	
<b>15</b>	6	16	Skippi Pops	Ice-Pops	1	
<b>64</b>	21	65	Get a Whey	Sugar-Free Icecream	1	
<b>66</b>	21	67	The Quirky Nari	Customised Apparels	1	
<b>79</b>	25	80	Sunfox Technologies	Portable ECG Device	1	
<b>88</b>	28	89	Humpy A2	Organic Milk Products	1	
<b>90</b>	28	91	Gold Safe Solutions Ind.	Anti-Suicidal Fan Rod	1	
<b>91</b>	29	92	Wakao Foods	Jackfruit Products	1	
<b>95</b>	30	96	Kabaddi Adda	All-Kabaddi App	1	
<b>110</b>	34	111	Nomad Food Project	Bacon Jams	1	
<b>114</b>	35	115	Jain Shikanji	Lemonade	1	

```
In [53]: vineeta['amount_per_shark'].sum()
```

```
Out[53]: 328.3333333300001
```

```
In [54]: vineeta['equity_per_shark'].sum()
```

```
Out[54]: 131.533333333
```

```
In [103... sharks(vineeta)
```



6 deals with anupam

	amount_per_shark	equity_per_shark
2	12.5	15.0
9	25.0	12.5
15	20.0	3.0
66	17.5	12.0
79	20.0	1.2
114	10.0	7.5

4 deals with aman

	amount_per_shark	equity_per_shark
0	25.000000	5.333333
15	20.000000	3.000000
64	33.333333	5.000000
114	10.000000	7.500000

5 deals with namita

	amount_per_shark	equity_per_shark
15	20.0	3.0
79	20.0	1.2
91	25.0	7.0
95	40.0	3.0
110	10.0	5.0

15 deals with vineeta

	amount_per_shark	equity_per_shark
0	25.000000	5.333333
1	20.000000	25.000000
2	12.500000	15.000000
8	20.000000	15.000000
9	25.000000	12.500000
15	20.000000	3.000000
64	33.333333	5.000000
66	17.500000	12.000000
79	20.000000	1.200000
88	33.333333	5.000000
90	16.666667	10.000000
91	25.000000	7.000000
95	40.000000	3.000000
110	10.000000	5.000000
114	10.000000	7.500000

3 deals with peyush

	amount_per_shark	equity_per_shark
79	20.000000	1.2
88	33.333333	5.0
90	16.666667	10.0

5 deals with ghazal

	amount_per_shark	equity_per_shark
79	20.000000	1.2
88	33.333333	5.0
90	16.666667	10.0
91	25.000000	7.0

110	10.000000	5.0
-----	-----------	-----

6 deals with ashneer		
	amount_per_shark	equity_per_shark
0	25.000000	5.333333
1	20.000000	25.000000
15	20.000000	3.000000
64	33.333333	5.000000
110	10.000000	5.000000
114	10.000000	7.500000

```
In [104... eqt = df.groupby('vineeta_deal')['equity_per_shark'].sum()[1]
amt = df.groupby('vineeta_deal')['amount_per_shark'].sum()[1]
print("Total equity buy on shark tank by vineeta",eqt,'%')
print("Total amount invested on shark tank by vineeta",amt,"lakhs")
```

Total equity buy on shark tank by vineeta 131.533333333 %  
Total amount invested on shark tank by vineeta 328.3333333300001 lakhs

```
In [105... vineeta[vineeta['amount_per_shark']==vineeta['amount_per_shark'].max()]
```

```
Out[105... episode_number pitch_number brand_name idea deal pitcher_ask_amc
```

<b>95</b>	30	96 Kabaddi Adda	All-Kabaddi App	1
-----------	----	-----------------	-----------------	---

```
In [106... vineeta[vineeta['deal_equity']==vineeta['deal_equity'].max()]
```

```
Out[106... episode_number pitch_number brand_name idea deal pitcher_ask_amc
```

<b>1</b>	1	2 Booz scooters	Renting e-bike for mobility in private spaces	1	4
----------	---	-----------------	-----------------------------------------------	---	---

## Peyush Deals

```
In [17]: peyush= df[df['peyush_deal']==1]
peyush
```

Out[17]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask
<b>22</b>	8	23	Vivalyf Innovations- Easy Life	Prickless Diabetes Testing Machine	1	
<b>25</b>	9	26	Ariro	Wooden Toys	1	
<b>27</b>	10	28	Nuutjob	Male Intimate Hygiene	1	
<b>28</b>	10	29	Meatyour	Eggs	1	
<b>29</b>	10	30	EventBeep	Student Community App	1	
<b>35</b>	12	36	LOKA	Metaverse App	1	
<b>36</b>	13	37	Annie	Braille Literary Device	1	
<b>37</b>	13	38	Caragreen	Eco- Friendly boxes	1	
<b>38</b>	13	39	The Yarn Bazaar	Yarn- Trading App	1	
<b>43</b>	15	44	PNT	Robotics and Automation Solutions	1	
<b>49</b>	17	50	Find Your Kicks India	Sneaker Resale	1	
<b>50</b>	17	51	Aas Vidyalaya	EdTech App	1	1
<b>52</b>	17	53	RoadBounce	Pothole Detection Software and Data	1	
<b>58</b>	19	59	WeSTOCK	Livestock health monitoring AI	1	
<b>61</b>	20	62	The State Plate	Delicacies	1	
<b>63</b>	20	64	IN A CAN	Can Cocktails	1	

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask
<b>65</b>	21	66	Sid07 Designs	Inventions	1	
<b>67</b>	22	68	Hair Originals	Natural Hair Extensions	1	
<b>76</b>	24	77	KG Agrotech	Agricultural Innovations	1	
<b>79</b>	25	80	Sunfox Technologies	Portable ECG Device	1	1
<b>81</b>	26	82	Isak Fragrances	Perfumes	1	
<b>85</b>	27	86	Watt Technovations	Ventilated PPE Kits	1	
<b>87</b>	27	88	Insurance Samadhan	Insurance Solutions	1	1
<b>88</b>	28	89	Humpy A2	Organic Milk Products	1	
<b>90</b>	28	91	Gold Safe Solutions Ind.	Anti-Suicidal Fan Rod	1	
<b>108</b>	33	109	Tweek Labs	Sportswear	1	
<b>109</b>	33	110	Proxgy	VR	1	

In [56]: `peyush['amount_per_shark'].sum()`

Out[56]: 719.6669191630001

In [57]: `peyush['equity_per_shark'].sum()`

Out[57]: 315.84999999999997

In [109... `sharks(peyush)`

6 deals with anupam

	amount_per_shark	equity_per_shark
2	12.5	15.0
9	25.0	12.5
15	20.0	3.0
66	17.5	12.0
79	20.0	1.2
114	10.0	7.5

4 deals with aman

	amount_per_shark	equity_per_shark
0	25.000000	5.333333
15	20.000000	3.000000
64	33.333333	5.000000
114	10.000000	7.500000

5 deals with namita

	amount_per_shark	equity_per_shark
15	20.0	3.0
79	20.0	1.2
91	25.0	7.0
95	40.0	3.0
110	10.0	5.0

15 deals with vineeta

	amount_per_shark	equity_per_shark
0	25.000000	5.333333
1	20.000000	25.000000
2	12.500000	15.000000
8	20.000000	15.000000
9	25.000000	12.500000
15	20.000000	3.000000
64	33.333333	5.000000
66	17.500000	12.000000
79	20.000000	1.200000
88	33.333333	5.000000
90	16.666667	10.000000
91	25.000000	7.000000
95	40.000000	3.000000
110	10.000000	5.000000
114	10.000000	7.500000

3 deals with peyush

	amount_per_shark	equity_per_shark
79	20.000000	1.2
88	33.333333	5.0
90	16.666667	10.0

5 deals with ghazal

	amount_per_shark	equity_per_shark
79	20.000000	1.2
88	33.333333	5.0
90	16.666667	10.0
91	25.000000	7.0

```

110          10.000000          5.0

6 deals with ashneer
   amount_per_shark  equity_per_shark
0          25.000000          5.333333
1          20.000000          25.000000
15         20.000000          3.000000
64         33.333333          5.000000
110        10.000000          5.000000
114        10.000000          7.500000

```

```

In [110]: eqt = df.groupby('peyush_deal')['equity_per_shark'].sum()[1]
          amt = df.groupby('peyush_deal')['amount_per_shark'].sum()[1]
          print("Total equity buy on shark tank by peyush",eqt,'%')
          print("Total amount invested on shark tank by peyush",amt,"lakhs")

```

```

Total equity buy on shark tank by peyush 315.84999999999997 %
Total amount invested on shark tank by peyush 719.666919163 lakhs

```

```

In [49]: peyush[peyush['amount_per_shark']==peyush['amount_per_shark'].max()]

```

```

Out[49]:
   episode_number  pitch_number  brand_name  idea  deal  pitcher_ask_an
87              27            88  Insurance  Insurance  1
   Samadhan  Solutions

```

```

In [48]: peyush[peyush['deal_equity']==peyush['deal_equity'].max()]

```

```

Out[48]:
   episode_number  pitch_number  brand_name  idea  deal  pitcher_ask_a
65              21            66  Sid07  Inventions  1
   Designs

```

```

In [20]: peyush.sort_values(by='equity_per_shark',ascending=False)

```

Out[20]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask
<b>65</b>	21	66	Sid07 Designs	Inventions	1	
<b>81</b>	26	82	Isak Fragrances	Perfumes	1	
<b>76</b>	24	77	KG Agrotech	Agricultural Innovations	1	
<b>43</b>	15	44	PNT	Robotics and Automation Solutions	1	
<b>52</b>	17	53	RoadBounce	Pothole Detection Software and Data	1	
<b>22</b>	8	23	Vivalyf Innovations- Easy Life	Prickless Diabetes Testing Machine	1	
<b>90</b>	28	91	Gold Safe Solutions Ind.	Anti- Suicidal Fan Rod	1	
<b>37</b>	13	38	Caragreen	Eco- Friendly boxes	1	
<b>35</b>	12	36	LOKA	Metaverse App	1	
<b>27</b>	10	28	Nuutjob	Male Intimate Hygiene	1	
<b>28</b>	10	29	Meatyour	Eggs	1	
<b>25</b>	9	26	Ariro	Wooden Toys	1	
<b>88</b>	28	89	Humpy A2	Organic Milk Products	1	
<b>109</b>	33	110	Proxgy	VR	1	
<b>50</b>	17	51	Aas Vidyalaya	EdTech App	1	1
<b>49</b>	17	50	Find Your Kicks India	Sneaker Resale	1	
<b>87</b>	27	88	Insurance Samadhan	Insurance Solutions	1	1
<b>108</b>	33	109	Tweek Labs	Sportswear	1	
<b>61</b>	20	62	The State	Delicacies	1	

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask
		Plate			
38	13	39 The Yarn Bazaar	Yarn-Trading App	1	
58	19	59 WeSTOCK	Livestock health monitoring AI	1	
63	20	64 IN A CAN	Can Cocktails	1	
67	22	68 Hair Originals	Natural Hair Extensions	1	
79	25	80 Sunfox Technologies	Portable ECG Device	1	1
85	27	86 Watt Technovations	Ventilated PPE Kits	1	
36	13	37 Annie	Braille Literary Device	1	
29	10	30 EventBeep	Student Community App	1	

## Ghazal Deals

```
In [58]: ghazal=df[df['ghazal_deal']==1]
ghazal
```



Out[58]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_i	
	75	24	76	The Sass Bar	Gifts	1	4
	79	25	80	Sunfox Technologies	Portable ECG Device	1	10
	85	27	86	Watt Technovations	Ventilated PPE Kits	1	
	88	28	89	Humpy A2	Organic Milk Products	1	7
	90	28	91	Gold Safe Solutions Ind.	Anti-Suicidal Fan Rod	1	5
	91	29	92	Wakao Foods	Jackfruit Products	1	7
	110	34	111	Nomad Food Project	Bacon Jams	1	4

```
In [59]: ghazal['amount_per_shark'].sum()
```

Out[59]: 130.0002525

```
In [60]: ghazal['equity_per_shark'].sum()
```

Out[60]: 46.7

```
In [115... sharks(ghazal)
```

```

3 deals with anupam
  amount_per_shark  equity_per_shark
75          25.000000          17.5
79          20.000000           1.2
85           0.000253           1.0

0 deals with aman
Empty DataFrame
Columns: [amount_per_shark, equity_per_shark]
Index: []

```

```

4 deals with namita
  amount_per_shark  equity_per_shark
79          20.000000           1.2
85           0.000253           1.0
91          25.000000           7.0
110         10.000000           5.0

```

```

5 deals with vineeta
  amount_per_shark  equity_per_shark
79          20.000000           1.2
88          33.333333           5.0
90          16.666667          10.0
91          25.000000           7.0
110         10.000000           5.0

```

```

4 deals with peyush
  amount_per_shark  equity_per_shark
79          20.000000           1.2
85           0.000253           1.0
88          33.333333           5.0
90          16.666667          10.0

```

```

7 deals with ghazal
  amount_per_shark  equity_per_shark
75          25.000000          17.5
79          20.000000           1.2
85           0.000253           1.0
88          33.333333           5.0
90          16.666667          10.0
91          25.000000           7.0
110         10.000000           5.0

```

```

1 deals with ashneer
  amount_per_shark  equity_per_shark
110          10.0           5.0

```

```

In [38]: eqt = df.groupby('ghazal_deal')['equity_per_shark'].sum()[1]
amt = df.groupby('ghazal_deal')['amount_per_shark'].sum()[1]
print("Total equity buy on shark tank by ghazal",eqt,'%')
print("Total amount invested on shark tank by ghazal",amt,"lakhs")

```

```

Total equity buy on shark tank by ghazal 46.7 %
Total amount invested on shark tank by ghazal 130.0002525 lakhs

```

```
In [117]: ghazal[ghazal['amount_per_shark']==ghazal['amount_per_shark'].max()]
```

```
Out[117]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_am
88	28	89	Humpy A2	Organic Milk Products	1	

```
In [118]: ghazal[ghazal['deal_equity']==ghazal['deal_equity'].max()]
```

```
Out[118]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_ammoun
75	24	76	The Sass Bar	Gifts	1	40.

```
In [128]: df.head(5)
```

```
Out[128]:
```

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_
0	1	1	BluePine Industries	Frozen Momos	1	
1	1	2	Booz scooters	Renting e-bike for mobility in private spaces	1	
2	1	3	Heart up my Sleeves	Detachable Sleeves	1	
3	2	4	Tagz Foods	Healthy Potato Chips	1	
4	2	5	Head and Heart	Brain Development Course	0	

## Number of Sharks Teamedup

```
In [14]: # Part-1
q=df[df['total_sharks_invested']>1]
q['total_sharks_invested'].value_counts()
```

```
Out[14]:
```

2	20
3	14
4	5
5	4

Name: total\_sharks\_invested, dtype: int64

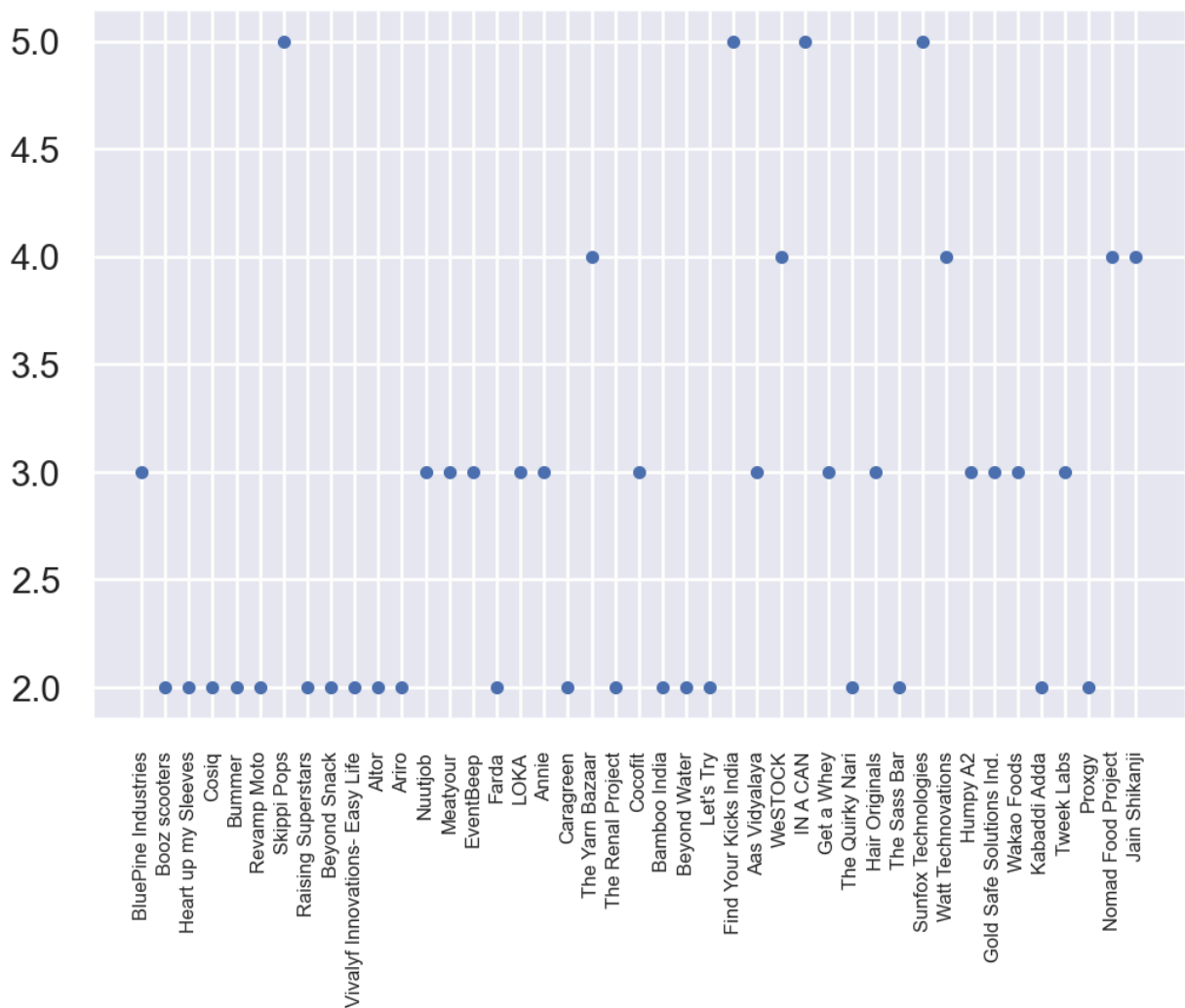
```
In [21]: # Part-2
teamup=df[df['total_sharks_invested']>1]
```

```
# plt.figure(figsize=(7,7))
# plt.hist(teamup.total_sharks_invested)
# plt.yticks(q['total_sharks_invested'].value_counts().values)
# plt.title('visualization of number of Sharks teamedup')
# plt.xlabel('Number of Sharks')
# plt.ylabel('Number of Investments');
```

```
In [55]: # part-4
plt.figure(dpi=200)
plt.scatter(teamup['brand_name'],teamup['total_sharks_invested'],s=9);

plt.xticks(rotation=90,fontsize=6)

plt.show()
```



```
In [162]: df.groupby(['ashneer_deal'])['amount_per_shark'].sum()
```

```
Out[162]: ashneer_deal
0    1627.166936
1     494.333333
Name: amount_per_shark, dtype: float64
```

```
In [17]: o=[1,2,3,45]
c=0
for i in o:
    c+=i
print(c)
```

51

```
In [19]: df.episode_number
```

```
Out[19]: 0      1
1      1
2      1
3      2
4      2
..
112    34
113    34
114    35
115    35
116    35
Name: episode_number, Length: 117, dtype: int64
```

## Total Amount invested by Sharks in Different Companies

```
In [23]: amt
```

```
-----
NameError                                Traceback (most recent call last)
Cell In[23], line 1
----> 1 amt

NameError: name 'amt' is not defined
```

```
In [22]: L=[494,887,223]
t=ash_grover['amount_per_shark'].sum()
t2=aman['amount_per_shark'].sum()
print(t)
print(t2)
```

```
494.33333333
887.500016693
```

```
In [ ]: e=[1,2,3,4,]
```

```
In [17]: a=df[df['ashneer_deal']==1]
aa=list(a['amount_per_shark'])
aa
t=0

for i in aa:
```

```

t+=i

b=df[df['anupam_deal']==1]
ba=list(b.amount_per_shark)
u=0
for i in ba:
    u+=i

c=df[df['aman_deal']==1]
ca=list(c.amount_per_shark)
v=0
for i in ca:
    v+=i

d=df[df['namita_deal']==1]
da=list(d.amount_per_shark)
w=0
for i in da:
    w+=i

e=df[df['vineeta_deal']==1]
ea=list(e.amount_per_shark)
x=0
for i in ea:
    x+=i

f=df[df['peyush_deal']==1]
fa=list(f.amount_per_shark)
y=0
for i in fa:
    y+=i

g=df[df['ghazal_deal']==1]
ga=list(g.amount_per_shark)
z=0
for i in ga:
    z+=i

```

```
In [18]: t=ash_grover['amount_per_shark'].sum()
         anump['']
```

```
In [21]: t
```

```
Out[21]: 533.83360253
```

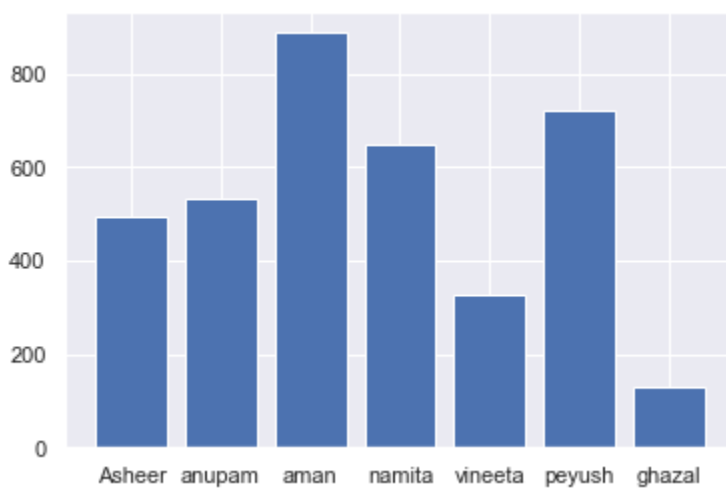
```
In [68]: peyush
```

Out[68]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask
<b>22</b>	8	23	Vivalyf Innovations- Easy Life	Prickless Diabetes Testing Machine	1	
<b>25</b>	9	26	Ariro	Wooden Toys	1	
<b>27</b>	10	28	Nuutjob	Male Intimate Hygiene	1	
<b>28</b>	10	29	Meatyour	Eggs	1	
<b>29</b>	10	30	EventBeep	Student Community App	1	
<b>35</b>	12	36	LOKA	Metaverse App	1	
<b>36</b>	13	37	Annie	Braille Literary Device	1	
<b>37</b>	13	38	Caragreen	Eco- Friendly boxes	1	
<b>38</b>	13	39	The Yarn Bazaar	Yarn- Trading App	1	
<b>43</b>	15	44	PNT	Robotics and Automation Solutions	1	
<b>49</b>	17	50	Find Your Kicks India	Sneaker Resale	1	
<b>50</b>	17	51	Aas Vidyalaya	EdTech App	1	1
<b>52</b>	17	53	RoadBounce	Pothole Detection Software and Data	1	
<b>58</b>	19	59	WeSTOCK	Livestock health monitoring AI	1	
<b>61</b>	20	62	The State Plate	Delicacies	1	
<b>63</b>	20	64	IN A CAN	Can Cocktails	1	

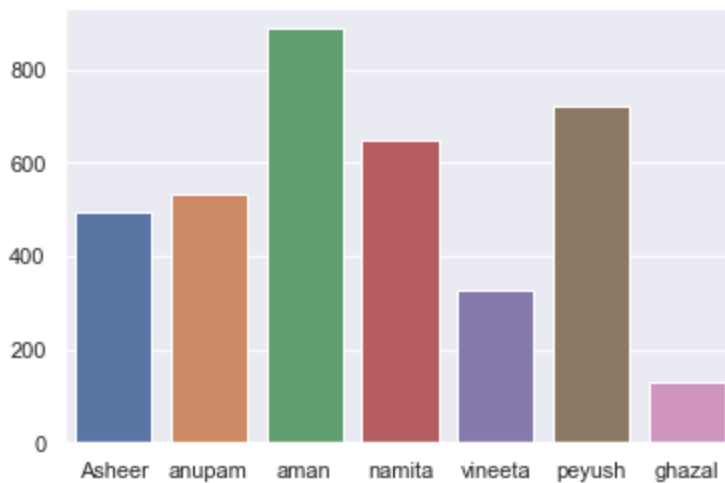
	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask
<b>65</b>	21	66	Sid07 Designs	Inventions	1	
<b>67</b>	22	68	Hair Originals	Natural Hair Extensions	1	
<b>76</b>	24	77	KG Agrotech	Agricultural Innovations	1	
<b>79</b>	25	80	Sunfox Technologies	Portable ECG Device	1	1
<b>81</b>	26	82	Isak Fragrances	Perfumes	1	
<b>85</b>	27	86	Watt Technovations	Ventilated PPE Kits	1	
<b>87</b>	27	88	Insurance Samadhan	Insurance Solutions	1	1
<b>88</b>	28	89	Humpy A2	Organic Milk Products	1	
<b>90</b>	28	91	Gold Safe Solutions Ind.	Anti-Suicidal Fan Rod	1	
<b>108</b>	33	109	Tweek Labs	Sportswear	1	
<b>109</b>	33	110	Proxgy	VR	1	

```
In [124... l1=['Asheer','anupam','aman','namita','vineeta','peyush','ghazal']
l2=[t,u,v,w,x,y,z]
plt.bar(l1,l2);
```



```
In [125... sns.barplot(l1,l2);
```





```
In [ ]: # L=[1,2,3,4,5,67,7,8,89,9]
# fo
```

```
In [50]: print('total amount invested by ashneer',t)
total amount invested by ashneer 494.33333333
```

```
In [36]: # ash=df[df['ashneer_deal']==1]
# ash['amount_per_shark'].sum()
```

```
Out[36]: 494.33333333
```

```
In [ ]:
```

```
In [49]: # print(t,u,v,w,x,y,z)
# L=[494.33333333, 533.83360253, 887.5000166929999, 648.333602533, 328.33333333]
# print(sum(L))
```

```
In [50]: # (494.33333333/3742.0010600789997)*100
```

```
In [ ]:
```

## Total equity owned by sharks in different Companies

```
In [36]: h=df[df['ashneer_deal']==1]
he=list(h.equity_per_shark)
a=0
for i in he:
    a+=i

i=df[df['anupam_deal']==1]
ie=list(i.equity_per_shark)
b=0
```

```

for y in ie:
    b+=y

j=df[df['aman_deal']==1]
je=list(j.equity_per_shark)
c=0
for i in je:
    c+=i

k=df[df['namita_deal']==1]
ke=list(k.equity_per_shark)
d=0
for i in ke:
    d+=i

l=df[df['vineeta_deal']==1]
le=list(l.equity_per_shark)
e=0
for i in le:
    e+=i

m=df[df['peyush_deal']==1]
me=list(m.equity_per_shark)
f=0
for i in me:
    f+=i

n=df[df['ghazal_deal']==1]
ne=list(n.equity_per_shark)
g=0
for i in ne:
    g+=i

```

```

In [22]: o=df[df['peyush_deal']==1]
         o['equity_per_shark'].sum()

```

```

Out[22]: 315.84999999999997

```

```

In [ ]: o=df[df['peyush_deal']==1]
        o['equity_per_shark'].sum()

```

```

In [19]: df.head(10)

```

Out[19]:	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_
<b>0</b>	1	1	BluePine Industries	Frozen Momos	1	
<b>1</b>	1	2	Booz scooters	Renting e-bike for mobility in private spaces	1	
<b>2</b>	1	3	Heart up my Sleeves	Detachable Sleeves	1	
<b>3</b>	2	4	Tagz Foods	Healthy Potato Chips	1	
<b>4</b>	2	5	Head and Heart	Brain Development Course	0	
<b>5</b>	2	6	Agro tourism	Tourism	0	
<b>6</b>	3	7	Qzense Labs	Food Freshness Detector	0	
<b>7</b>	3	8	Peeschute	Disposable Urine Bag	1	
<b>8</b>	3	9	NOCD	Energy Drink	1	
<b>9</b>	4	10	Cosiq	Intelligent Skincare	1	

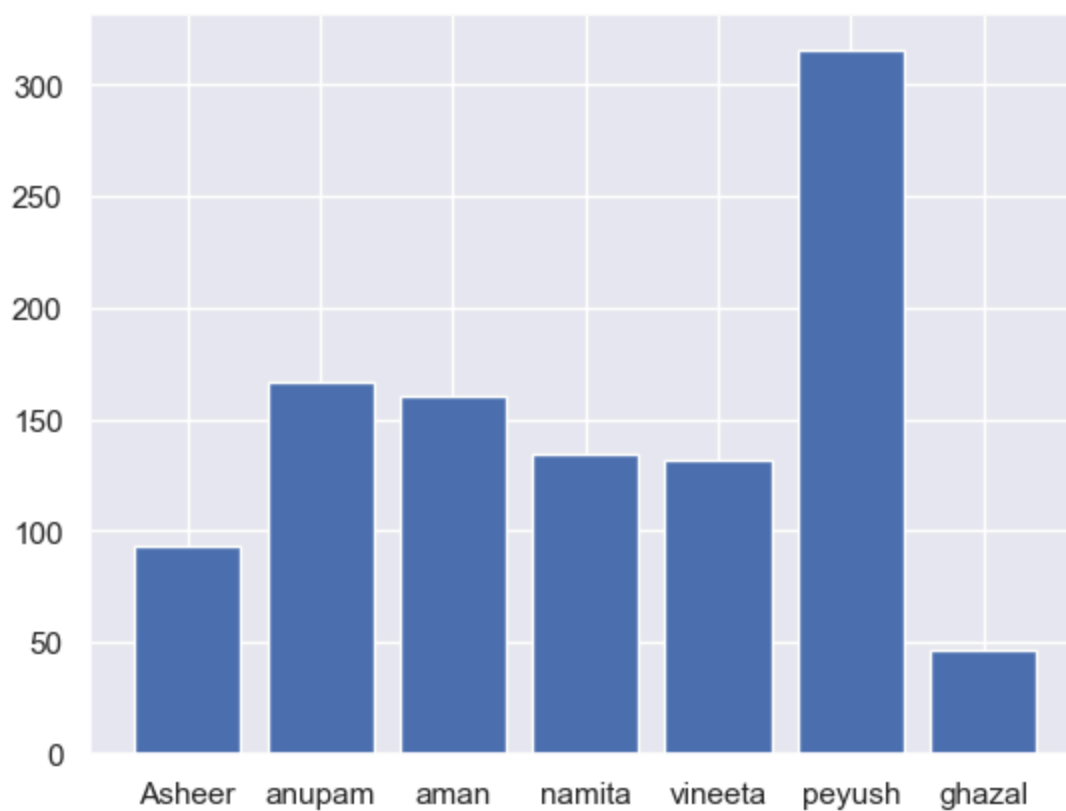
In [66]: `peyush.sort_values(by='equity_per_shark',ascending=False)`

Out[66]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask
<b>65</b>	21	66	Sid07 Designs	Inventions	1	
<b>81</b>	26	82	Isak Fragrances	Perfumes	1	
<b>76</b>	24	77	KG Agrotech	Agricultural Innovations	1	
<b>43</b>	15	44	PNT	Robotics and Automation Solutions	1	
<b>52</b>	17	53	RoadBounce	Pothole Detection Software and Data	1	
<b>22</b>	8	23	Vivalyf Innovations- Easy Life	Prickless Diabetes Testing Machine	1	
<b>90</b>	28	91	Gold Safe Solutions Ind.	Anti- Suicidal Fan Rod	1	
<b>37</b>	13	38	Caragreen	Eco- Friendly boxes	1	
<b>35</b>	12	36	LOKA	Metaverse App	1	
<b>27</b>	10	28	Nuutjob	Male Intimate Hygiene	1	
<b>28</b>	10	29	Meatyour	Eggs	1	
<b>25</b>	9	26	Ariro	Wooden Toys	1	
<b>88</b>	28	89	Humpy A2	Organic Milk Products	1	
<b>109</b>	33	110	Proxgy	VR	1	
<b>50</b>	17	51	Aas Vidyalaya	EdTech App	1	1
<b>49</b>	17	50	Find Your Kicks India	Sneaker Resale	1	
<b>87</b>	27	88	Insurance Samadhan	Insurance Solutions	1	1
<b>108</b>	33	109	Tweek Labs	Sportswear	1	
<b>61</b>	20	62	The State	Delicacies	1	

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask
		Plate			
38	13	39	The Yarn Bazaar	Yarn-Trading App	1
58	19	59	WeSTOCK	Livestock health monitoring AI	1
63	20	64	IN A CAN	Can Cocktails	1
67	22	68	Hair Originals	Natural Hair Extensions	1
79	25	80	Sunfox Technologies	Portable ECG Device	1
85	27	86	Watt Technovations	Ventilated PPE Kits	1
36	13	37	Annie	Braille Literary Device	1
29	10	30	EventBeep	Student Community App	1

```
In [37]: l1=['Asheer','anupam','aman','namita','vineeta','peyush','ghazal']
l2=[a,b,c,d,e,f,g]
plt.bar(l1,l2);
```



```
In [52]: xyz=df[df['ashneer_deal']==1]
xyz['equity_per_shark'].sum()
```

Out[52]: 93.249999999

```
In [67]: df['anupam_deal'].sum()
```

Out[67]: 24

```
In [56]: df.head(2)
```

```
Out[56]:
```

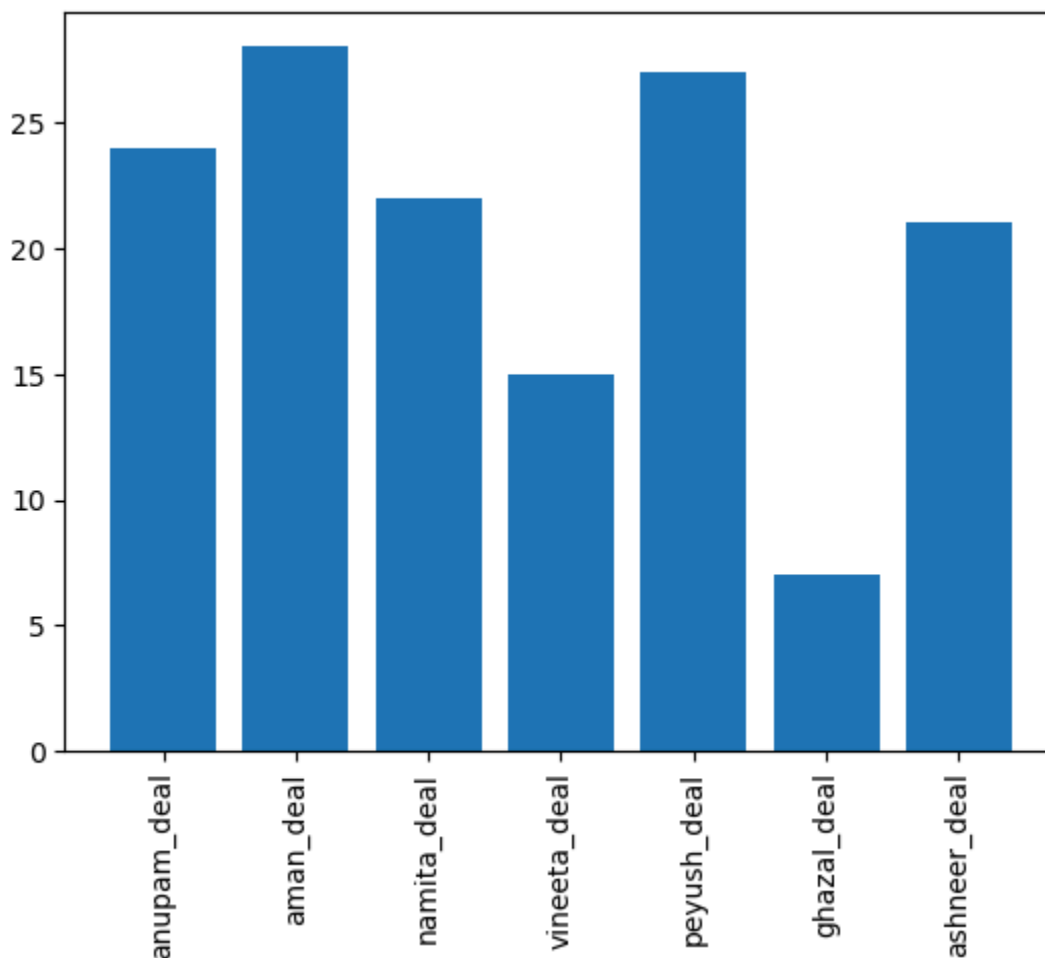
	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amou
<b>0</b>	1	1	BluePine Industries	Frozen Momos	1	5
<b>1</b>	1	2	Booz scooters	Renting e-bike for mobility in private spaces	1	4

## which Shark invested in most companies

```
In [24]: D=[]  
list = ['anupam_deal','aman_deal','namita_deal','vineeta_deal','peyush_deal','  
for i in list:  
    deal = df[i].sum()  
    D.append(deal)  
    print(i,"deals with",deal,"companies" )
```

anupam\_deal deals with 24 companies  
aman\_deal deals with 28 companies  
namita\_deal deals with 22 companies  
vineeta\_deal deals with 15 companies  
peyush\_deal deals with 27 companies  
ghazal\_deal deals with 7 companies  
ashneer\_deal deals with 21 companies

```
In [25]: plt.bar(list,D)  
plt.xticks(rotation=90);
```



```
In [ ]:
```

```
In [58]: # len(df[df['anupam_deal']==1])
```

```
In [54]: 24+28+22+15+27+7+21
```

```
Out[54]: 144
```

## Insights 8: Which Shark present at the time of Company

```
In [57]: df.head(1)
```

```
Out[57]:
```

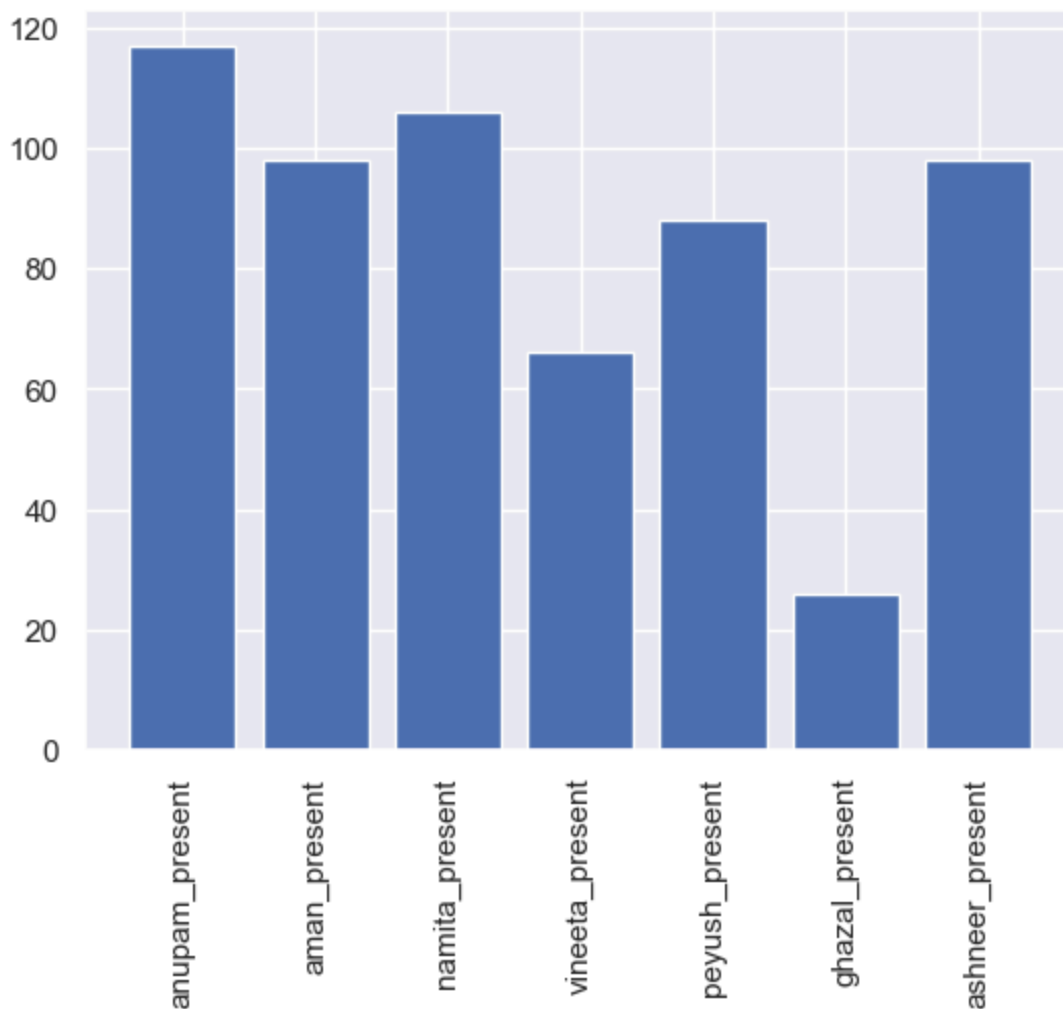
	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amo
0	1	1	BluePine Industries	Frozen Momos	1	50

```
In [41]: p=[]
list = ['anupam_present','aman_present','namita_present','vineeta_present','pe
for i in list:
    pres = df[i].sum()
    p.append(pres)
    print(i,"present in front of",pres,"companies" )
```

anupam\_present present in front of 117 companies  
aman\_present present in front of 98 companies  
namita\_present present in front of 106 companies  
vineeta\_present present in front of 66 companies  
peyush\_present present in front of 88 companies  
ghazal\_present present in front of 26 companies  
ashneer\_present present in front of 98 companies

```
In [43]: plt.bar(list,p)
plt.xticks(rotation=90);
```





```
In [59]: ashneer=(df['ashneer_present'])
anupam=(df['anupam_present'])
aman=(df['aman_present'])
namita=(df['namita_present'])
vineeta=(df['vineeta_present'])
peyush=(df['peyush_present'])
ghazal=(df['ghazal_present'])
```

```
xx=pd.DataFrame({'Sharks':['ASHNEER','ANUPAM','AMAN','NAMITA','VINEETA','PEYUSH','GHAZAL'],
                  'Number_of_appearance':[sum(ashneer),sum(anupam),sum(aman),sum(namita),sum(vineeta),sum(peyush),sum(ghazal)]})
```

```
In [61]: sum(ashneer)
```

```
Out[61]: 98
```

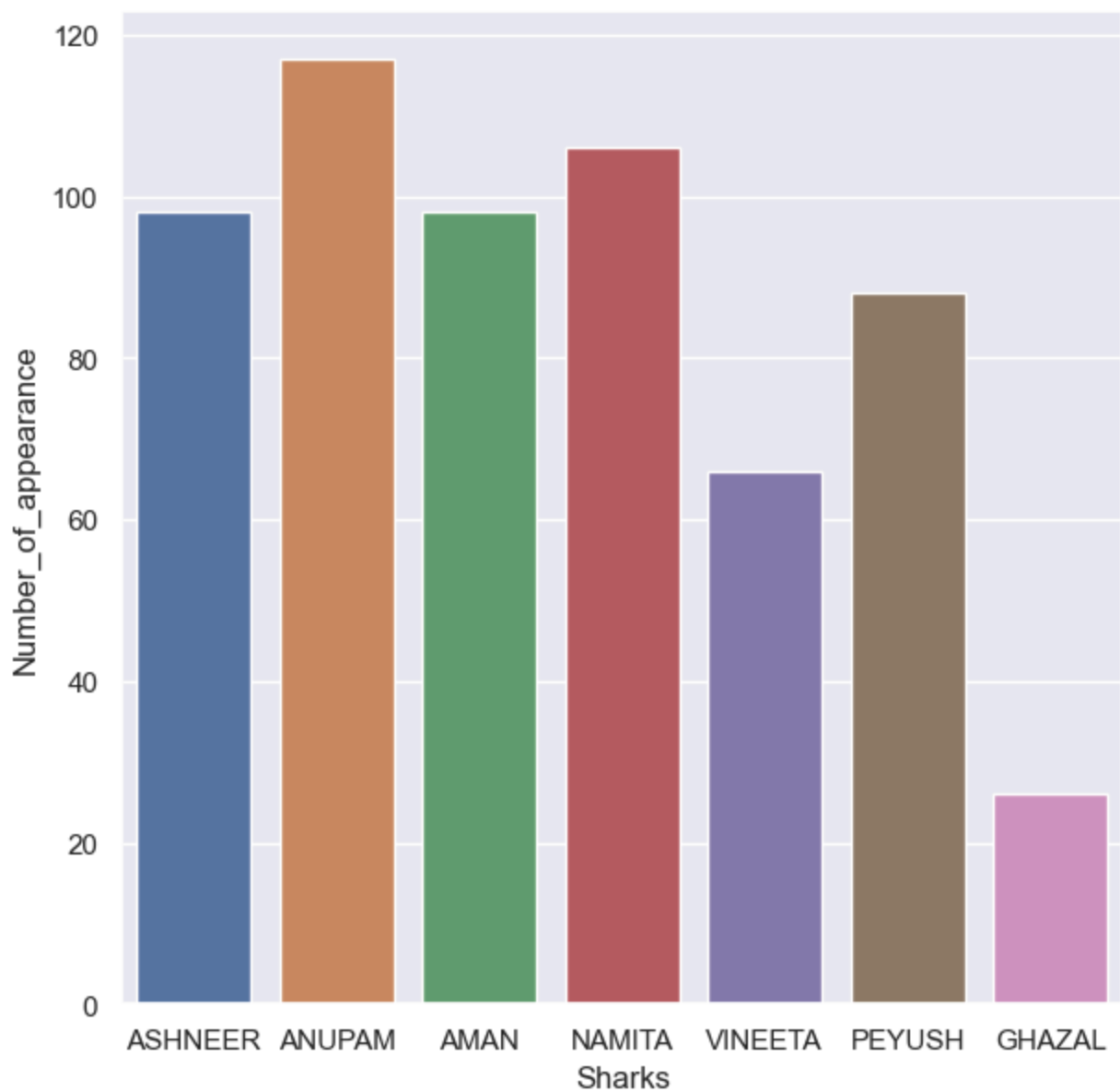
```
In [91]: xx
```

Out[91]:

	Sharks	Number_of_appearance
0	ASHNEER	98
1	ANUPAM	117
2	AMAN	98
3	NAMITA	106
4	VINEETA	66
5	PEYUSH	88
6	GHAZAL	26

	Sharks	Number_of_appearance
0	ASHNEER	98
1	ANUPAM	117
2	AMAN	98
3	NAMITA	106
4	VINEETA	66
5	PEYUSH	88
6	GHAZAL	26

```
In [63]: plt.figure(figsize=(7,7))  
sns.barplot(x='Sharks',y='Number_of_appearance',data=xx);
```



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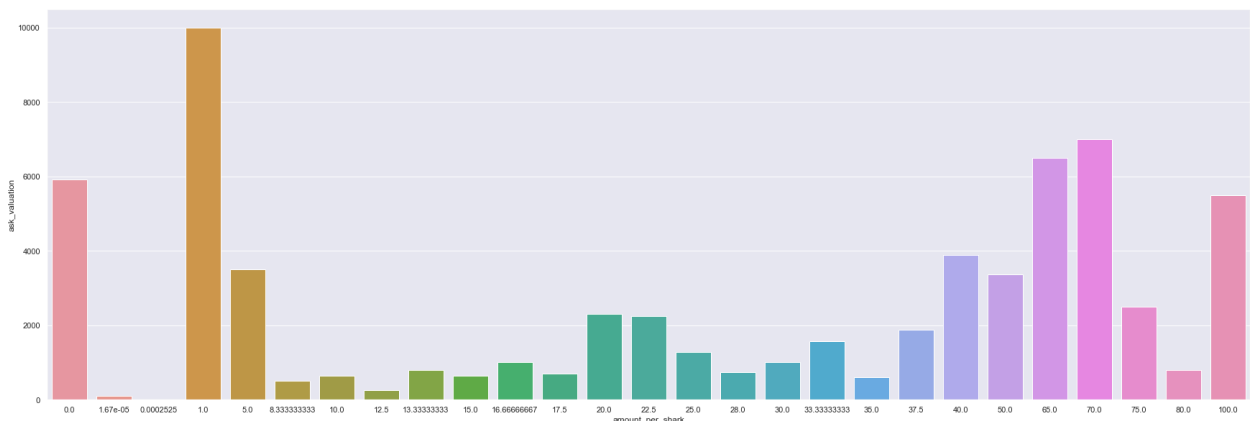
In [ ]:

In [ ]:

In [ ]:

## Amount invested by the shark According to the ask valuation

```
In [63]: fig, ax = plt.subplots(figsize =(30, 10))
sns.barplot(data = df, y='ask_valuation', x='amount_per_shark',ci=None)
plt.show()
```



```
In [39]: d={}
m=int(input('how many columns'))
for k in range(m):
    x=input('enter x ')
    j=0
    n=len(x)
    u=0
    for i in range(n):
        d[u]=[x[j]]
        u+=1
```

```
d
a=pd.Series(d)
z=pd.DataFrame(a)
```

how many columns2  
enter x deepanshu  
enter x verma

In [40]: z

Out[40]:

	0
0	v
1	v
2	v
3	v
4	v
5	d
6	d
7	d
8	d

In [48]:

```
D={}
L=[]

i=0
for i in range(2):
    x=input('enter ').split(' ')

    D[i]=x
    i+=1
pd.DataFrame(D)
```

enter deepanshu  
enter abcdefghi

Out[48]:

	0	1
0	deepanshu	abcdefghi

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]: