

Shark Tank India

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 [3]:

```
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

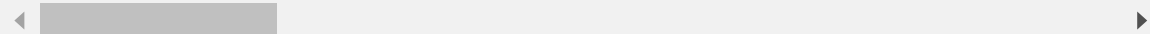
In [4]:

```
df = pd.read_csv("Shark Tank India Dataset (1).csv")
df
```

Out[4]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	a
0	1	1	BluePine Industries	Frozen Momos	1	50.0	
1	1	2	Booz scooters	Renting e-bike for mobility in private spaces	1	40.0	
2	1	3	Heart up my Sleeves	Detachable Sleeves	1	25.0	
3	2	4	Tagz Foods	Healthy Potato Chips	1	70.0	
4	2	5	Head and Heart	Brain Development Course	0	50.0	
...	
112	34	113	Green Protein	Plant-Based Protein	0	60.0	
113	34	114	On2Cook	Fastest Cooking Device	0	100.0	
114	35	115	Jain Shikanji	Lemonade	1	40.0	
115	35	116	Woloo	Washroom Finder	0	50.0	
116	35	117	Elcare India	Carenting for Elders	0	100.0	

117 rows × 28 columns



In [6]:

```
df.shape
```

Out[6]:

(117, 28)

In [7]:

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 [8]:

```
df.isnull().sum()
```

Out[8]:

```
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 [9]:

```
df.describe()
```

Out[9]:

	episode_number	pitch_number	deal	pitcher_ask_amount	ask_equity	ask_val
count	117.000000	117.000000	117.000000	117.000000	117.000000	117.0
mean	18.735043	59.000000	0.555556	319.854709	5.188034	3852.4
std	10.070778	33.919021	0.499041	2767.842777	3.892121	11931.6
min	1.000000	1.000000	0.000000	0.001010	0.250000	0.0
25%	10.000000	30.000000	0.000000	45.000000	2.500000	666.6
50%	19.000000	59.000000	1.000000	50.000000	5.000000	1250.0
75%	27.000000	88.000000	1.000000	80.000000	7.500000	2857.1
max	35.000000	117.000000	1.000000	30000.000000	25.000000	120000.0

Exploratory Data Analysis (EDA)

How many deals done in the whole season

In [10]:

```
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 [11]:

```
df['deal'].value_counts()
```

Out[11]:

1 65

0 52

Name: deal, dtype: int64

In [12]:

```
deal=df['deal'].value_counts().values[0]
no_deal=df['deal'].value_counts().values[1]
print(deal)
print(no_deal)
```

65

52

In [13]:

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

Out[13]:

1 55.555556

0 44.444444

Name: deal, dtype: float64

In [14]:

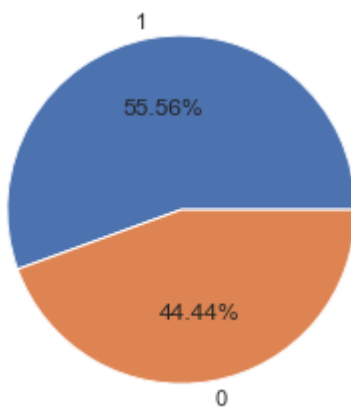
```
v=df['deal'].value_counts().values
i=df['deal'].value_counts().index
v
i
```

Out[14]:

Int64Index([1, 0], dtype='int64')

In [15]:

```
plt.pie(v,labels=i,autopct='%.2f%%');
```

#2 decimal places

Deals percentages

Most Dealing Episode

In [16]:

```
best_episodes=df.groupby(['episode_number'])['deal'].sum().sort_values(ascending=False).  
best_episodes  
# kis episode me sbse zyada deals hui  
# max 3 ideas share hote the per episode and 3no ideas me invest krne k liye ready hogye
```

Out[16]:

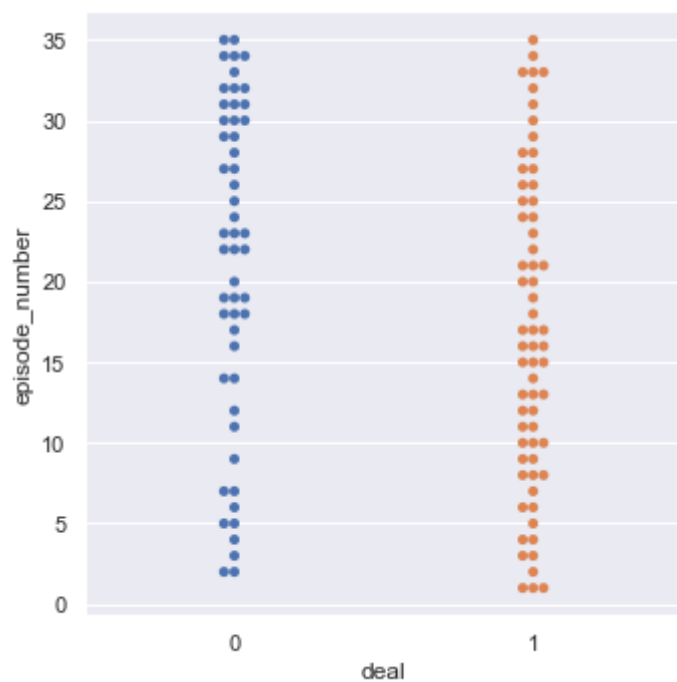
	episode_number	deal
0	1	3
1	15	3
2	21	3
3	33	3
4	8	3
5	10	3
6	17	3
7	16	3
8	13	3
9	25	2
10	24	2
11	28	2
12	20	2
13	26	2
14	27	2
15	12	2
16	11	2
17	9	2
18	6	2
19	4	2
20	3	2
21	31	1
22	30	1
23	29	1
24	34	1
25	32	1
26	18	1
27	23	1
28	22	1
29	19	1
30	2	1
31	14	1
32	7	1
33	5	1
34	35	1

In [17]:

```
sns.catplot(x = 'deal', y = 'episode_number', kind='swarm', data = df)
```

Out[17]:

<seaborn.axisgrid.FacetGrid at 0x19f989a7430>



Most Expensive dealing Episodes

In [18]:

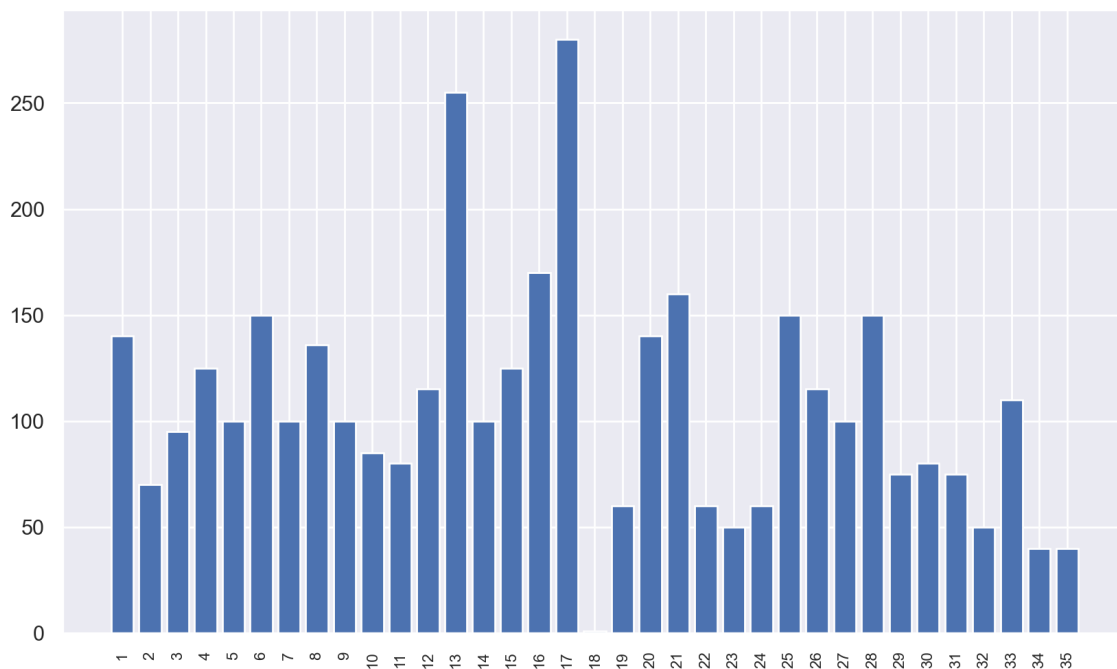
```
A=df.groupby(df['episode_number'])['deal_amount'].sum().sort_values(ascending=False).res  
A
```

Out[18]:

	episode_number	deal_amount
0	17	280.00000
1	13	255.00000
2	16	170.00000
3	21	160.00000
4	28	150.00000
5	25	150.00000
6	6	150.00000
7	20	140.00000
8	1	140.00000
9	8	136.00000
10	15	125.00005
11	4	125.00000
12	12	115.00000
13	26	115.00000
14	33	110.00000
15	27	100.00101
16	9	100.00000
17	14	100.00000
18	7	100.00000
19	5	100.00000
20	3	95.00000
21	10	85.00000
22	11	80.00000
23	30	80.00000
24	29	75.00000
25	31	75.00000
26	2	70.00000
27	24	60.00000
28	19	60.00000
29	22	60.00000
30	23	50.00000
31	32	50.00000
32	34	40.00000
33	35	40.00000
34	18	1.00000

In [19]:

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



Observation:-

Episode no. 17 was the episode with the most expensive business dealings.

All Sharks invested

In [20]:

```
df[df['total_sharks_invested']==5]
# konse episode me sare sharks ne invest kiya
# ye per day ke hisab se nhi hai whole data pr based hai
```

Out[20]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_ec
15	6	16	Skippi Pops	Ice-Pops	1	45.0
49	17	50	Find Your Kicks India	Sneaker Resale	1	50.0
63	20	64	IN A CAN	Can Cocktails	1	50.0
79	25	80	Sunfox Technologies	Portable ECG Device	1	100.0

In [21]:

```
df['total_sharks_invested'].value_counts()
```

Out[21]:

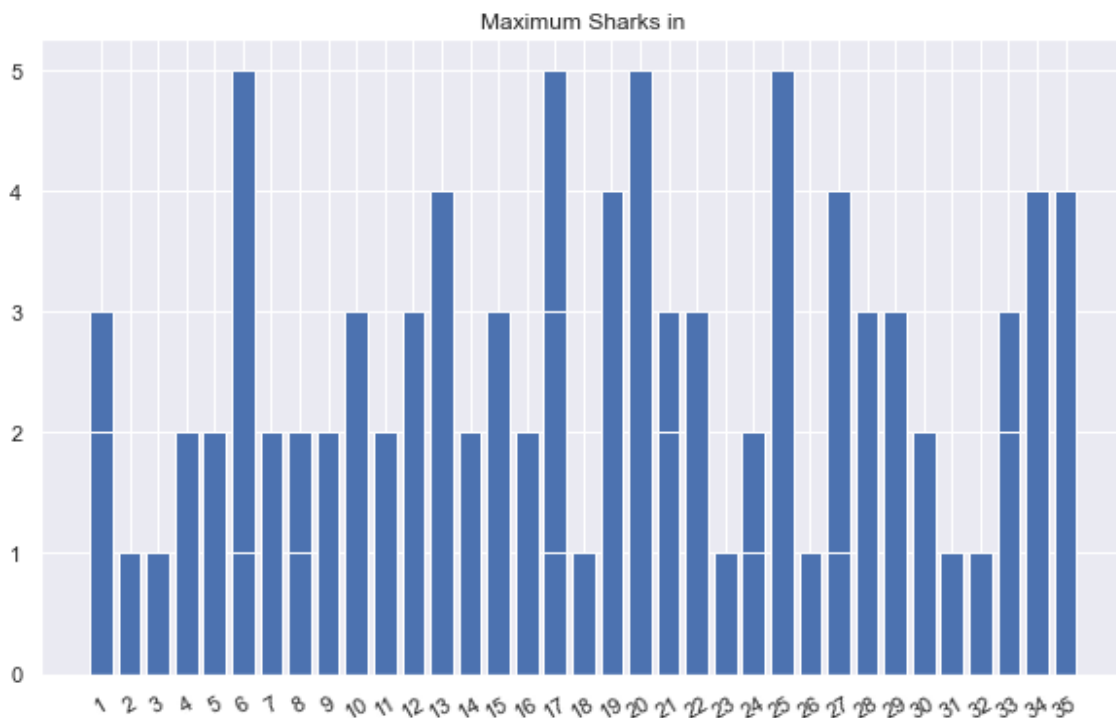
```
0    52
1    22
2    20
3    14
4     5
5     4
Name: total_sharks_invested, dtype: int64
```

Insights

1. There are 4 episodes where all the 5 sharks invested.
2. There are 5 episodes where 4 sharks invested.
3. There are 14 episodes where 3 sharks invested.
4. There are 20 episodes where 2 sharks invested.
5. There are 22 episodes where 1 shark invested.
6. There are 52 episodes where 0 sharks invested.

In [22]:

```
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 [23]:

```
df[df['total_sharks_invested']==5]
```

Out[23]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_ec
15	6	16	Skippi Pops	Ice-Pops	1	45.0	
49	17	50	Find Your Kicks India	Sneaker Resale	1	50.0	
63	20	64	IN A CAN	Can Cocktails	1	50.0	
79	25	80	Sunfox Technologies	Portable ECG Device	1	100.0	

No Bargain Deal

In [24]:

```
df[df['ask_valuation']==df['deal_valuation']]
```

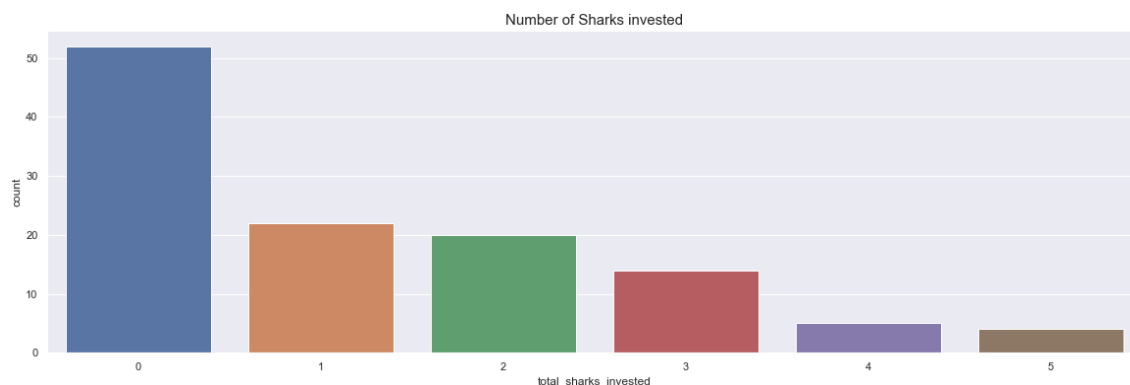
Out[24]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_eq
21	8	22	Beyond Snack	Kerala Banana Chips	1	50.0	

No of Sharks invested with respect to Business

In [25]:

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



In [26]:

```
df.head(1)
```

Out[26]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_equil
0	1	1	BluePine Industries	Frozen Momos	1	50.0	5

Created a function that show the Equity and Amount per shark

In [27]:

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

Ashneer Deals

In [92]:

```
ash_grover = df[df['ashneer_deal']==1]
ash_grover
(df['ashneer_deal']==1).value_counts()
```

Out[92]:

```
False    96
True     21
Name: ashneer_deal, dtype: int64
```

In [29]:

```
ash_grover[['amount_per_shark', 'equity_per_shark']][ash_grover['anupam_deal']==1]
```

Out[29]:

	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 [30]:

```
ash_grover
```

Out[30]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	a
0	1	1	BluePine Industries	Frozen Momos	1	50.0
1	1	2	Booz scooters	Renting e-bike for mobility in private spaces	1	40.0
3	2	4	Tagz Foods	Healthy Potato Chips	1	70.0
15	6	16	Skippi Pops	Ice-Pops	1	45.0
18	7	19	Raising Superstars	Child Development App	0	100.0
21	8	22	Beyond Snack	Kerala Banana Chips	1	50.0
23	8	24	Motion Breeze	Smart Electric Motorcycle	1	30.0
29	10	30	EventBeep	Student Community App	1	30.0
38	13	39	The Yarn Bazaar	Yarn-Trading App	1	50.0
45	16	46	Bamboo India	Bamboo Products	1	80.0
49	17	50	Find Your Kicks India	Sneaker Resale	1	50.0
50	17	51	Aas Vidyalaya	EdTech App	1	150.0
55	18	56	Otua	Electric Auto Vehicle	1	100.0
58	19	59	WeSTOCK	Livestock health monitoring AI	1	50.0
63	20	64	IN A CAN	Can Cocktails	1	50.0
64	21	65	Get a Whey	Sugar-Free Icecream	1	100.0
67	22	68	Hair Originals	Natural Hair Extensions	1	60.0
108	33	109	Tweek Labs	Sportswear	1	40.0
109	33	110	Proxgy	VR	1	35.0
110	34	111	Nomad Food Project	Bacon Jams	1	40.0
114	35	115	Jain Shikanji	Lemonade	1	40.0

In [31]:

```
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 [32]:

```
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 [33]:

```
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]:

```
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 [35]:

```
ash_grover['amount_per_shark'].sum()
```

Out[35]:

494.33333333

In [36]:

```
ash_grover['amount_per_shark'].max()
```

Out[36]:

70.0

In [37]:

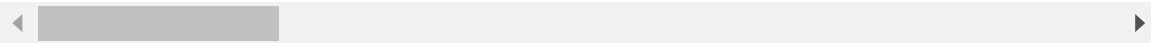
```
# ash_grover[ash_grover['amount_per_shark']==70.0]
```

In [38]:

```
ash_grover.sort_values(by='amount_per_shark',ascending=False).head(1)
```

Out[38]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_equi	
3	2	4	Tagz Foods	Healthy Potato Chips	1	70.0	1



In [39]:

```
ash_grover['amount_per_shark'].max()
```

Out[39]:

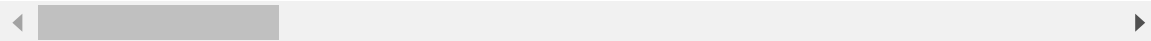
70.0

In [40]:

```
ash_grover[ash_grover['amount_per_shark']==ash_grover['amount_per_shark'].max()]
```

Out[40]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_equi	
3	2	4	Tagz Foods	Healthy Potato Chips	1	70.0	1

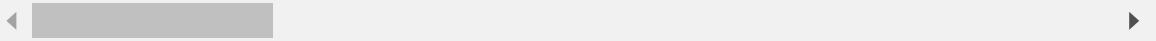


In [41]:

```
ash_grover[ash_grover['equity_per_shark']==ash_grover['equity_per_shark'].max()]
```

Out[41]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_equi	
1	1	2	Booz scooters	Renting e-bike for mobility in private spaces	1	40.0	15



Anupam Deals

In [42]:

```
anupam = df[df['anupam_deal']==1]  
anupam
```


Out[42]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	as
2	1	3 Heart up my Sleeves	Detachable Sleeves	1	25.00000	
9	4	10 Cosiq	Intelligent Skincare	1	50.00000	
12	5	13 Revamp Moto	E-Bike	1	100.00000	
15	6	16 Skippi Pops	Ice-Pops	1	45.00000	
22	8	23 Vivalyf Innovations-Easy Life	Prickless Diabetes Testing Machine	1	56.00000	
28	10	29 Meatyour	Eggs	1	30.00000	
31	11	32 ARRCOAT Surface Textures	Wall Building	1	50.00000	
35	12	36 LOKA	Metaverse App	1	40.00000	
36	13	37 Annie	Braille Literary Device	1	30.00000	
37	13	38 Caragreen	Eco-Friendly boxes	1	50.00000	
38	13	39 The Yarn Bazaar	Yarn-Trading App	1	50.00000	
44	15	45 Cocofit	Coconut based beverage franchise	1	5.00000	
45	16	46 Bamboo India	Bamboo Products	1	80.00000	
48	16	49 Let's Try	Healthy Snacks	1	45.00000	
49	17	50 Find Your Kicks India	Sneaker Resale	1	50.00000	
63	20	64 IN A CAN	Can Cocktails	1	50.00000	
66	21	67 The Quirky Nari	Customised Apparels	1	35.00000	
67	22	68 Hair Originals	Natural Hair Extensions	1	60.00000	
75	24	76 The Sass Bar	Gifts	1	40.00000	
78	25	79 PawsIndia	Dog Products	1	50.00000	
79	25	80 Sunfox Technologies	Portable ECG Device	1	100.00000	
85	27	86 Watt Technovations	Ventilated PPE Kits	1	0.00101	

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	as
108	33	109	Tweek Labs	Sportswear	1	40.00000
114	35	115	Jain Shikanji	Lemonade	1	40.00000

In [43]:

```
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 [44]:

```
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 [45]:

```
anupam['amount_per_shark'].sum()
```

Out[45]:

533.83360253

In [46]:

```
anupam['equity_per_shark'].sum()
```

Out[46]:

166.35

In [47]:

```
anupam[anupam['amount_per_shark']==anupam['amount_per_shark'].max()]
```

Out[47]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_eq
12	5	Revamp Moto	E-Bike	1	100.0	
31	11	ARRCOAT Surface Textures	Wall Building	1	50.0	
78	25	PawsIndia	Dog Products	1	50.0	

In [48]:

```
anupam[anupam['equity_per_shark']==anupam['equity_per_shark'].max()]
```

Out[48]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_equity
75	24	The Sass Bar	Gifts	1	40.0	8.0

Aman Deals

In [49]:

```
aman = df[df['aman_deal']==1]  
aman
```

Out[49]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	a
0	1	1	BluePine Industries	Frozen Momos	1	50.0
7	3	8	Peeschute	Disposable Urine Bag	1	75.0
11	4	12	Bummer	Underwear	1	75.0
12	5	13	Revamp Moto	E-Bike	1	100.0
15	6	16	Skippi Pops	Ice-Pops	1	45.0
18	7	19	Raising Superstars	Child Development App	0	100.0
21	8	22	Beyond Snack	Kerala Banana Chips	1	50.0
24	9	25	Altor	Smart Helmets	1	50.0
25	9	26	Ariro	Wooden Toys	1	50.0
27	10	28	Nuutjob	Male Intimate Hygiene	1	25.0
28	10	29	Meatyour	Eggs	1	30.0
29	10	30	EventBeep	Student Community App	1	30.0
32	11	33	Farda	Customised Streetwear	1	30.0
35	12	36	LOKA	Metaverse App	1	40.0
38	13	39	The Yarn Bazaar	Yarn-Trading App	1	50.0
39	14	40	The Renal Project	Home Dialysis Treatment	1	100.0
42	15	43	Hammer Lifestyle	Smart Audio Products	1	30.0
44	15	45	Cocofit	Coconut based beverage franchise	1	5.0
47	16	48	Beyond Water	Liquid Water Enhancer	1	75.0
48	16	49	Let's Try	Healthy Snacks	1	45.0
49	17	50	Find Your Kicks India	Sneaker Resale	1	50.0
58	19	59	WeSTOCK	Livestock health monitoring AI	1	50.0

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	a
63	20	64	IN A CAN	Can Cocktails	1	50.0
64	21	65	Get a Whey	Sugar-Free Icecream	1	100.0
71	23	72	Namhya Foods	Ayurvedic Enriched Food	1	100.0
100	31	101	AyuRythm	Ayurvedic Wellness App	1	75.0
104	32	105	GrowFitter	Rewards App	1	50.0
114	35	115	Jain Shikanji	Lemonade	1	40.0

In [50]:

```
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

28 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
18	50.000000	2.000000
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: []

11 deals with ashneer

	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

In [51]:

```
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 887.500016693 lakhs

In [52]:

```
aman['amount_per_shark'].sum()
```

Out[52]:

887.500016693

In [53]:

```
aman['equity_per_shark'].sum()
```

Out[53]:

160.263333334

In [54]:

```
aman[aman['amount_per_shark']==aman['amount_per_shark'].max()]
```

Out[54]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_eq
42	15	43	Hammer Lifestyle	Smart Audio Products	1	30.0

In [55]:

```
aman[aman['deal_equity']==aman['deal_equity'].max()]
```

Out[55]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_eq
42	15	43	Hammer Lifestyle	Smart Audio Products	1	30.0

Namita Deals

In [56]:

```
namita = df[df['namita_deal']==1]  
namita
```

Out[56]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	as
11	4	12	Bummer	Underwear	1	75.00000
15	6	16	Skippi Pops	Ice-Pops	1	45.00000
16	6	17	Menstrupedia	Menstrual Awareness Comic	1	50.00000
24	9	25	Altor	Smart Helmets	1	50.00000
27	10	28	Nuutjob	Male Intimate Hygiene	1	25.00000
32	11	33	Farda	Customised Streetwear	1	30.00000
33	12	34	Auli Lifestyle	Ayurvedic Products	1	75.00000
36	13	37	Annie	Braille Literary Device	1	30.00000
39	14	40	The Renal Project	Home Dialysis Treatment	1	100.00000
44	15	45	Cocofit	Coconut based beverage franchise	1	5.00000
47	16	48	Beyond Water	Liquid Water Enhancer	1	75.00000
49	17	50	Find Your Kicks India	Sneaker Resale	1	50.00000
50	17	51	Aas Vidyalaya	EdTech App	1	150.00000
58	19	59	WeSTOCK	Livestock health monitoring AI	1	50.00000
63	20	64	IN A CAN	Can Cocktails	1	50.00000
79	25	80	Sunfox Technologies	Portable ECG Device	1	100.00000
83	26	84	Rare Planet	Handicrafts	1	65.00000
85	27	86	Watt Technovations	Ventilated PPE Kits	1	0.00101
91	29	92	Wakao Foods	Jackfruit Products	1	75.00000
95	30	96	Kabaddi Adda	All-Kabaddi App	1	80.00000
106	33	107	Colour Me Mad	Insoles	1	40.00000

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	as
110	34	111	Nomad Food Project	Bacon Jams	1	40.00000

In [57]:

```
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 [58]:

```
eqt = df.groupby('namita_deal')['equity_per_shark'].sum().loc[1]
amt = df.groupby('namita_deal')['amount_per_shark'].sum().loc[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 134.7833333334 %
Total amount invested on shark tank by namita 648.333602533 lakhs

In [59]:

```
namita[namita['amount_per_shark']==namita['amount_per_shark'].max()]
```

Out[59]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_e
33	12	34	Auli Lifestyle	Ayurvedic Products	1	75.0	

In [60]:

```
namita[namita['equity_per_shark']==namita['equity_per_shark'].max()]
```

Out[60]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_eq
106	33	107	Colour Me Mad	Insoles	1	40.0	

Vineeta Deals

In [61]:

```
vineeta = df[df['vineeta_deal']==1]
vineeta
```

Out[61]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	asked_amount
0	1	1	BluePine Industries	Frozen Momos	1	50.0	50.0
1	1	2	Booz scooters	Renting e-bike for mobility in private spaces	1	40.0	40.0
2	1	3	Heart up my Sleeves	Detachable Sleeves	1	25.0	25.0
8	3	9	NOCD	Energy Drink	1	50.0	50.0
9	4	10	Cosiq	Intelligent Skincare	1	50.0	50.0
15	6	16	Skippi Pops	Ice-Pops	1	45.0	45.0
64	21	65	Get a Whey	Sugar-Free Icecream	1	100.0	100.0
66	21	67	The Quirky Nari	Customised Apparels	1	35.0	35.0
79	25	80	Sunfox Technologies	Portable ECG Device	1	100.0	100.0
88	28	89	Humpy A2	Organic Milk Products	1	75.0	75.0
90	28	91	Gold Safe Solutions Ind.	Anti-Suicidal Fan Rod	1	50.0	50.0
91	29	92	Wakao Foods	Jackfruit Products	1	75.0	75.0
95	30	96	Kabaddi Adda	All-Kabaddi App	1	80.0	80.0
110	34	111	Nomad Food Project	Bacon Jams	1	40.0	40.0
114	35	115	Jain Shikanji	Lemonade	1	40.0	40.0

In [62]:

```
vineeta['amount_per_shark'].sum()
```

Out[62]:

328.3333333300001

In [63]:

```
vineeta['equity_per_shark'].sum()
```

Out[63]:

131.533333333

In [64]:

```
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 [65]:

```

eqt = df.groupby('vineeta_deal')['equity_per_shark'].sum().loc[1]
amt = df.groupby('vineeta_deal')['amount_per_shark'].sum().loc[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 328.333333333 lakhs

In [66]:

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

Out[66]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_eq
95	30	96	Kabaddi Adda	All-Kabaddi App	1	80.0	

In [67]:

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

Out[67]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_eq
1	1	2	Booz scooters	Renting e-bike for mobility in private spaces	1	40.0	15

Peyush Deals

In [68]:

```
peyush= df[df['peyush_deal']==1]  
peyush
```

Out[68]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	as
22	8	Vivalyf Innovations- Easy Life	Prickless Diabetes Testing Machine	1	56.00000	
25	9	Ariro	Wooden Toys	1	50.00000	
27	10	Nuutjob	Male Intimate Hygiene	1	25.00000	
28	10	Meatyour	Eggs	1	30.00000	
29	10	EventBeep	Student Community App	1	30.00000	
35	12	LOKA	Metaverse App	1	40.00000	
36	13	Annie	Braille Literary Device	1	30.00000	
37	13	Caragreen	Eco- Friendly boxes	1	50.00000	
38	13	The Yarn Bazaar	Yarn- Trading App	1	50.00000	
43	15	PNT	Robotics and Automation Solutions	1	50.00000	
49	17	Find Your Kicks India	Sneaker Resale	1	50.00000	
50	17	Aas Vidyalaya	EdTech App	1	150.00000	
52	17	RoadBounce	Pothole Detection Software and Data	1	80.00000	
58	19	WeSTOCK	Livestock health monitoring AI	1	50.00000	
61	20	The State Plate	Delicacies	1	65.00000	
63	20	IN A CAN	Can Cocktails	1	50.00000	
65	21	Sid07 Designs	Inventions	1	47.00000	
67	22	Hair Originals	Natural Hair Extensions	1	60.00000	
76	24	KG Agrotech	Agricultural Innovations	1	30.00000	

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	as
79	25	80Sunfox Technologies	Portable ECG Device	1	100.00000	
81	26	82Isak Fragrances	Perfumes	1	50.00000	
85	27	86Watt Technovations	Ventilated PPE Kits	1	0.00101	
87	27	88Insurance Samadhan	Insurance Solutions	1	100.00000	
88	28	89Humpy A2	Organic Milk Products	1	75.00000	
90	28	91Gold Safe Solutions Ind.	Anti-Suicidal Fan Rod	1	50.00000	
108	33	109Tweek Labs	Sportswear	1	40.00000	
109	33	110Proxgy	VR	1	35.00000	

In [69]:

```
peyush['amount_per_shark'].sum()
```

Out[69]:

719.6669191630001

In [70]:

```
peyush['equity_per_shark'].sum()
```

Out[70]:

315.84999999999997

In [71]:

```
sharks(peyush)
```

12 deals with anupam

	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

9 deals with aman

	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

8 deals with namita

	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

3 deals with vineeta

	amount_per_shark	equity_per_shark
79	20.000000	1.2
88	33.333333	5.0
90	16.666667	10.0

27 deals with peyush

	amount_per_shark	equity_per_shark
22	28.000000	16.650000
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
36	35.000000	1.000000
37	25.000000	10.000000
38	25.000000	2.500000
43	25.000000	25.000000
49	10.000000	5.000000
50	50.000000	5.000000
52	80.000000	20.000000
58	15.000000	2.500000

61	40.000000	3.000000
63	20.000000	2.000000
65	25.000000	75.000000
67	20.000000	1.333333
76	10.000000	40.000000
79	20.000000	1.200000
81	50.000000	50.000000
85	0.000253	1.000000
87	100.000000	4.000000
88	33.333333	5.000000
90	16.666667	10.000000
108	20.000000	3.333333
109	5.000000	5.000000

4 deals with ghazal

	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

9 deals with ashneer

	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

In [72]:

```
eqt = df.groupby('peyush_deal')['equity_per_shark'].sum().loc[1]
amt = df.groupby('peyush_deal')['amount_per_shark'].sum().loc[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 315.85 %

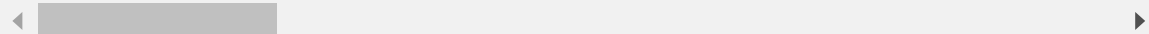
Total amount invested on shark tank by peyush 719.666919163 lakhs

In [73]:

```
peyush[peyush['amount_per_shark']==peyush['amount_per_shark'].max()]
```

Out[73]:

episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_e
87	27	88 Insurance Samadhan	Insurance Solutions	1	100.0	



In [74]:

```
peyush[peyush['deal_equity']==peyush['deal_equity'].max()]
```

Out[74]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_e
65	21	66	Sid07 Designs	Inventions	1	47.0	

Ghazal Deals

In [75]:

```
ghazal=df[df['ghazal_deal']==1]  
ghazal
```

Out[75]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_e
75	24	76	The Sass Bar	Gifts	1	40.00000	
79	25	80	Sunfox Technologies	Portable ECG Device	1	100.00000	
85	27	86	Watt Technovations	Ventilated PPE Kits	1	0.00101	
88	28	89	Humpy A2	Organic Milk Products	1	75.00000	
90	28	91	Gold Safe Solutions Ind.	Anti-Suicidal Fan Rod	1	50.00000	
91	29	92	Wakao Foods	Jackfruit Products	1	75.00000	
110	34	111	Nomad Food Project	Bacon Jams	1	40.00000	

In [76]:

```
ghazal['amount_per_shark'].sum()
```

Out[76]:

130.0002525

In [77]:

```
ghazal['equity_per_shark'].sum()
```

Out[77]:

46.7

In [78]:

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 [79]:

```
eqt = df.groupby('ghazal_deal')['equity_per_shark'].sum().loc[1]
amt = df.groupby('ghazal_deal')['amount_per_shark'].sum().loc[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 130.00025250000002 lakhs

In [80]:

```
ghazal[ghazal['amount_per_shark']==ghazal['amount_per_shark'].max()]
```

Out[80]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_eq
88	28	89	Humpy A2	Organic Milk Products	1	75.0	

In [81]:

```
ghazal[ghazal['deal_equity']==ghazal['deal_equity'].max()]
```

Out[81]:

	episode_number	pitch_number	brand_name	idea	deal	pitcher_ask_amount	ask_equity
75	24	76	The Sass Bar	Gifts	1	40.0	8.0

Number of Sharks Teamedup

In [82]:

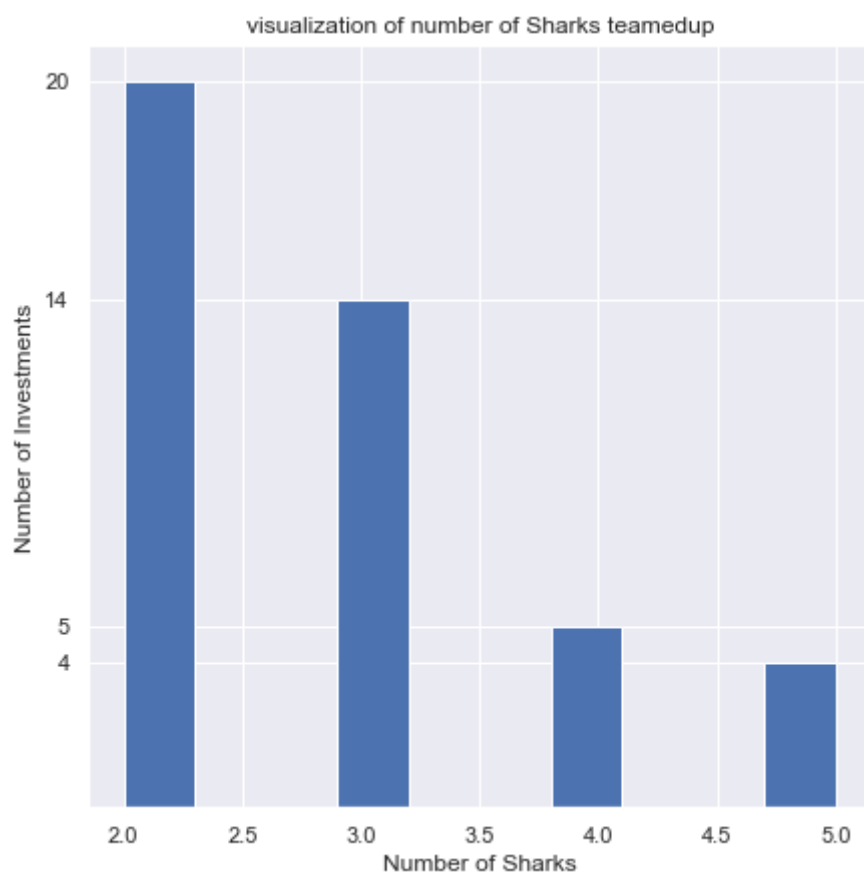
```
# Part-1 # more than 1
q=df[df['total_sharks_invested']>1]
q['total_sharks_invested'].value_counts()
```

Out[82]:

```
2    20
3    14
4     5
5     4
Name: total_sharks_invested, dtype: int64
```

In [83]:

```
# Part-2 # showing in pairs
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');
```

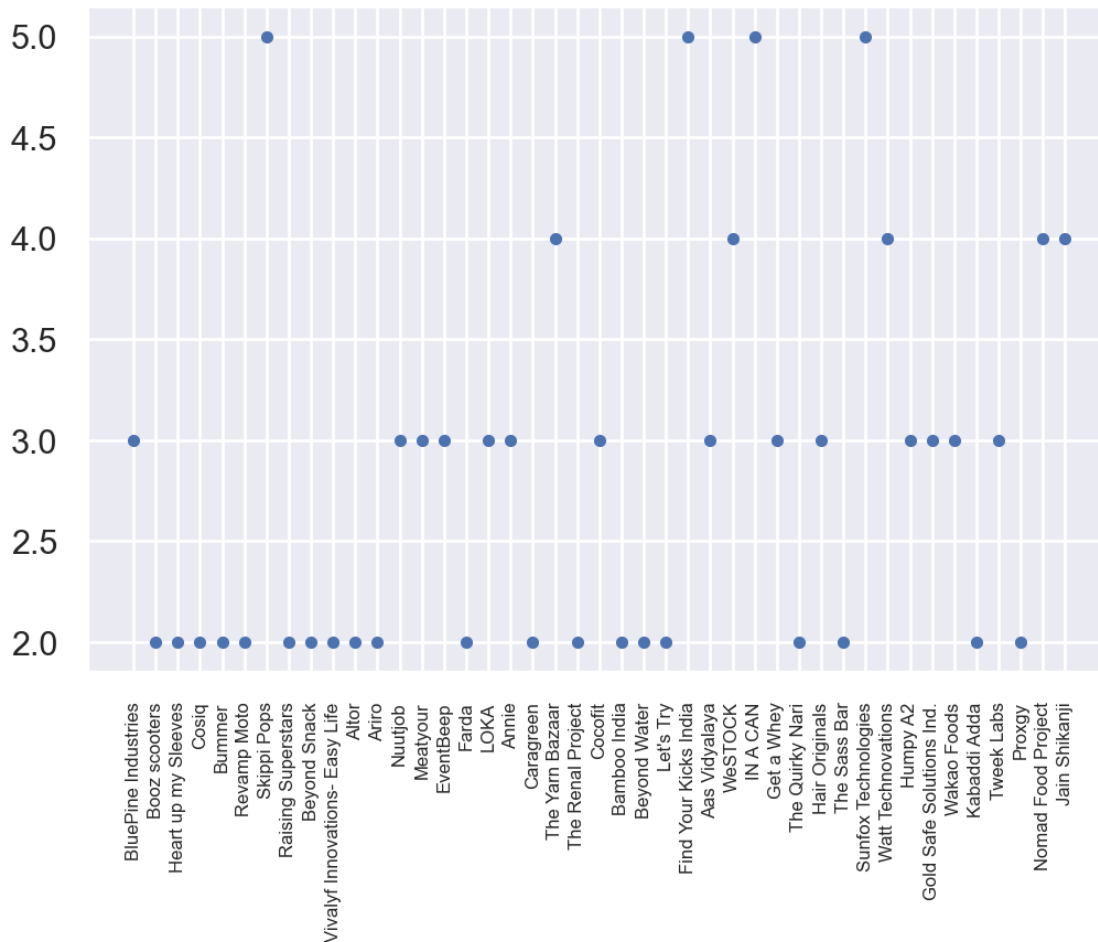


In [84]:

```
# 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 [85]:

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

Out[85]:

```
ashneer_deal
0    1627.166936
1     494.333333
Name: amount_per_shark, dtype: float64
```

In [86]:

```
df.episode_number
```

Out[86]:

```
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
```

Which Shark invested in most companies

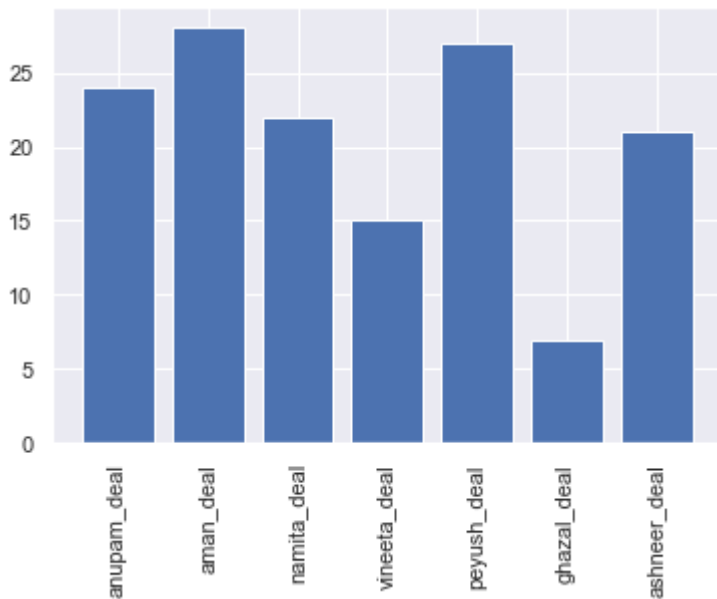
In [87]:

```
D=[]
list = ['anupam_deal', 'aman_deal', 'namita_deal', 'vineeta_deal', 'peyush_deal', 'ghazal_dea
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 [88]:

```
plt.bar(list,D)  
plt.xticks(rotation=90);
```



Which Shark present at the time of Company

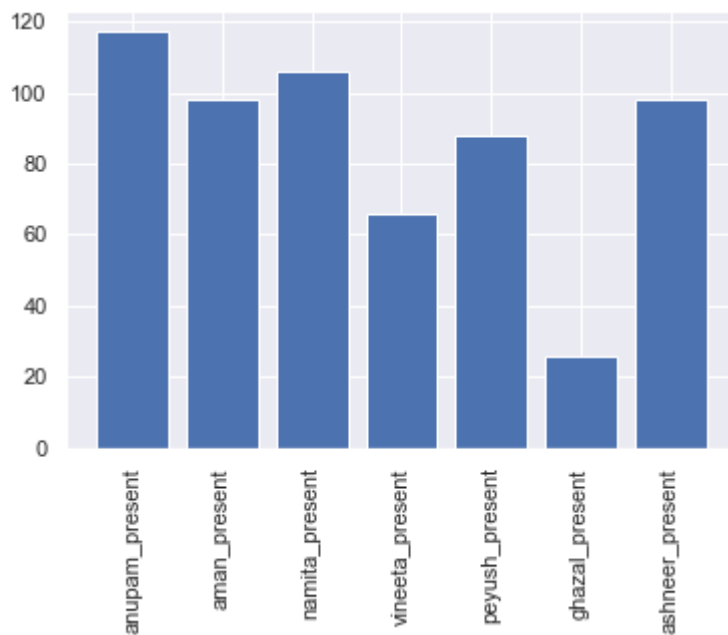
In [89]:

```
p=[]  
list = ['anupam_present', 'aman_present', 'namita_present', 'vineeta_present', 'peyush_prese  
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 [90]:

```
plt.bar(list,p)  
plt.xticks(rotation=90);
```



Overall Insight

Peyush deals with 27 companies and where he invested 719.666lakhs and 315.85% of the equity he bought. He was the most profitable shark on the show.