

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]:

```
data = pd.read_csv("Shark_Tank_India_Season_1.csv")
```

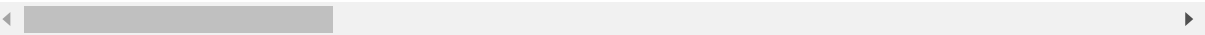
In [3]:

```
data
```

Out[3]:

	episode_number	startup_number	brand_name	description	deal_offered	startup_ask_amc
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	
...	
116	35	117	Elcare India	Carenting for Elders	0	
117	36	118	Sneakare	Shoe care and storage solutions	1	
118	36	119	French Crown	Clothing Industry	0	
119	36	120	Store My Goods	Storage solutions	1	
120	36	121	Devnagri	Translation platform	0	

121 rows × 32 columns



In [4]:

```
data.head()
```

Out[4]:

episode_number	startup_number	brand_name	description	deal_offered	startup_ask_amour
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

5 rows × 32 columns

In [5]:

```
data.tail()
```

Out[5]:

episode_number	startup_number	brand_name	description	deal_offered	startup_ask_amou
116	35	117	Elcare India	Carenting for Elders	0
117	36	118	Sneakare	Shoe care and storage solutions	1
118	36	119	French Crown	Clothing Industry	0
119	36	120	Store My Goods	Storage solutions	1
120	36	121	Devnagri	Translation platform	0

5 rows × 32 columns

In [6]:



```
data.shape
```

Out[6]:

```
(121, 32)
```

In [7]:



```
data.columns
```

Out[7]:

```
Index(['episode_number', 'startup_number', 'brand_name', 'description',  
      'deal_offered', 'startup_ask_amount_lakhs', 'startup_ask_percentag  
e',  
      'startup_ask_valuation', 'deal_amount_lakhs', 'deal_equity',  
      'deal_valuation', 'loan_element_present', 'loan_amount',  
      'rannvijay_present', 'abish_present', 'aman_present', 'aman_investe  
d',  
      'anupam_present', 'anupam_invested', 'ashneer_present',  
      'ashneer_invested', 'ghazal_present', 'ghazal_invested',  
      'namita_present', 'namita_invested', 'peyush_present',  
      'peyush_invested', 'vineeta_present', 'vineeta_invested',  
      'sharks_offering', 'amount_per_shark', 'equity_per_shark'],  
      dtype='object')
```

In [8]:



```
data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 121 entries, 0 to 120
Data columns (total 32 columns):
 #   Column                                Non-Null Count  Dtype
---  -
 0   episode_number                       121 non-null    int64
 1   startup_number                       121 non-null    int64
 2   brand_name                           121 non-null    object
 3   description                           121 non-null    object
 4   deal_offered                         121 non-null    int64
 5   startup_ask_amount_lakhs             121 non-null    float64
 6   startup_ask_percentage                121 non-null    float64
 7   startup_ask_valuation                121 non-null    float64
 8   deal_amount_lakhs                    121 non-null    float64
 9   deal_equity                          121 non-null    float64
10   deal_valuation                       121 non-null    float64
11   loan_element_present                 121 non-null    int64
12   loan_amount                         121 non-null    int64
13   rannvijay_present                   121 non-null    int64
14   abish_present                       121 non-null    int64
15   aman_present                        121 non-null    int64
16   aman_invested                       121 non-null    int64
17   anupam_present                      121 non-null    int64
18   anupam_invested                     121 non-null    int64
19   ashneer_present                     121 non-null    int64
20   ashneer_invested                     121 non-null    int64
21   ghazal_present                      121 non-null    int64
22   ghazal_invested                     121 non-null    int64
23   namita_present                      121 non-null    int64
24   namita_invested                     121 non-null    int64
25   peyush_present                      121 non-null    int64
26   peyush_invested                     121 non-null    int64
27   vineeta_present                     121 non-null    int64
28   vineeta_invested                     121 non-null    int64
29   sharks_offering                     121 non-null    int64
30   amount_per_shark                    121 non-null    float64
31   equity_per_shark                     121 non-null    float64
dtypes: float64(8), int64(22), object(2)
memory usage: 30.4+ KB
```

In [9]:

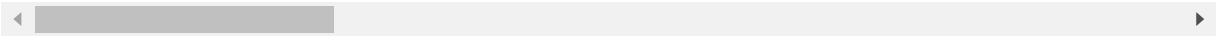


```
data.describe()
```

Out[9]:

	episode_number	startup_number	deal_offered	startup_ask_amount_lakhs	startup_ask_per
count	121.000000	121.000000	121.000000	121.000000	12
mean	19.305785	61.000000	0.561983	312.338851	
std	10.375326	35.073732	0.498206	2721.640471	
min	1.000000	1.000000	0.000000	0.001010	
25%	11.000000	31.000000	0.000000	45.000000	
50%	19.000000	61.000000	1.000000	50.000000	
75%	28.000000	91.000000	1.000000	80.000000	
max	36.000000	121.000000	1.000000	30000.000000	2

8 rows × 30 columns



In [10]:



```
data.isnull().sum()
```

Out[10]:

```
episode_number      0
startup_number      0
brand_name          0
description          0
deal_offered        0
startup_ask_amount_lakhs  0
startup_ask_percentage  0
startup_ask_valuation  0
deal_amount_lakhs    0
deal_equity          0
deal_valuation       0
loan_element_present  0
loan_amount          0
rannvijay_present    0
abish_present        0
aman_present         0
aman_invested        0
anupam_present       0
anupam_invested      0
ashneer_present      0
ashneer_invested     0
ghazal_present       0
ghazal_invested      0
namita_present       0
namita_invested      0
peyush_present       0
peyush_invested      0
vineeta_present      0
vineeta_invested     0
sharks_offering      0
amount_per_shark     0
equity_per_shark     0
dtype: int64
```

In [11]:



```
data['deal_offered'].value_counts()
```

Out[11]:

```
1    68
0    53
Name: deal_offered, dtype: int64
```

In [15]:



```
data['aman_present'].value_counts()
```

Out[15]:

```
1    102
0     19
Name: aman_present, dtype: int64
```

In [16]:



```
data['anupam_present'].value_counts()
```

Out[16]:

```
1    121
Name: anupam_present, dtype: int64
```

In [17]:



```
data['ashneer_present'].value_counts()
```

Out[17]:

```
1     98
0     23
Name: ashneer_present, dtype: int64
```

In [20]:



```
data['ghazal_present'].value_counts()
```

Out[20]:

```
0     95
1     26
Name: ghazal_present, dtype: int64
```

In [21]:



```
data['peyush_present'].value_counts()
```

Out[21]:

```
1     92
0     29
Name: peyush_present, dtype: int64
```

In [22]:

```
data['namita_present'].value_counts()
```

Out[22]:

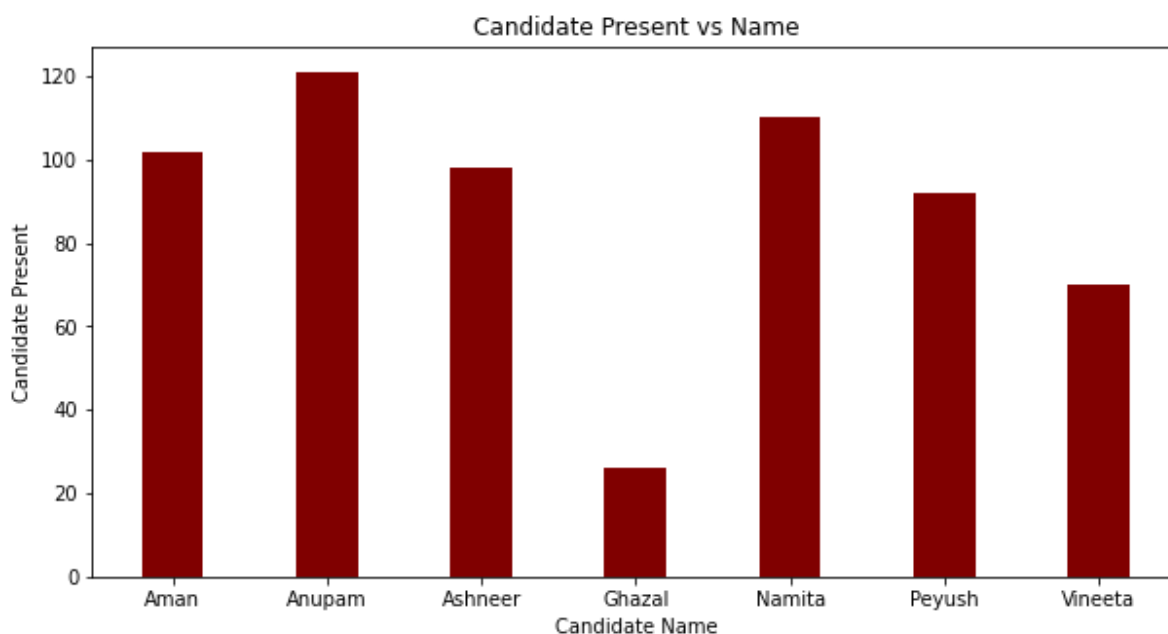
```
1    110
0     11
Name: namita_present, dtype: int64
```

In [23]:

```
aman_present = len(data[data.aman_present == 1])
anupam_present = len(data[data.anupam_present == 1])
ashneer_present = len(data[data.ashneer_present == 1])
ghazal_present = len(data[data.ghazal_present == 1])
namita_present = len(data[data.namita_present == 1])
peyush_present = len(data[data.peyush_present == 1])
vineeta_present = len(data[data.vineeta_present == 1])
```

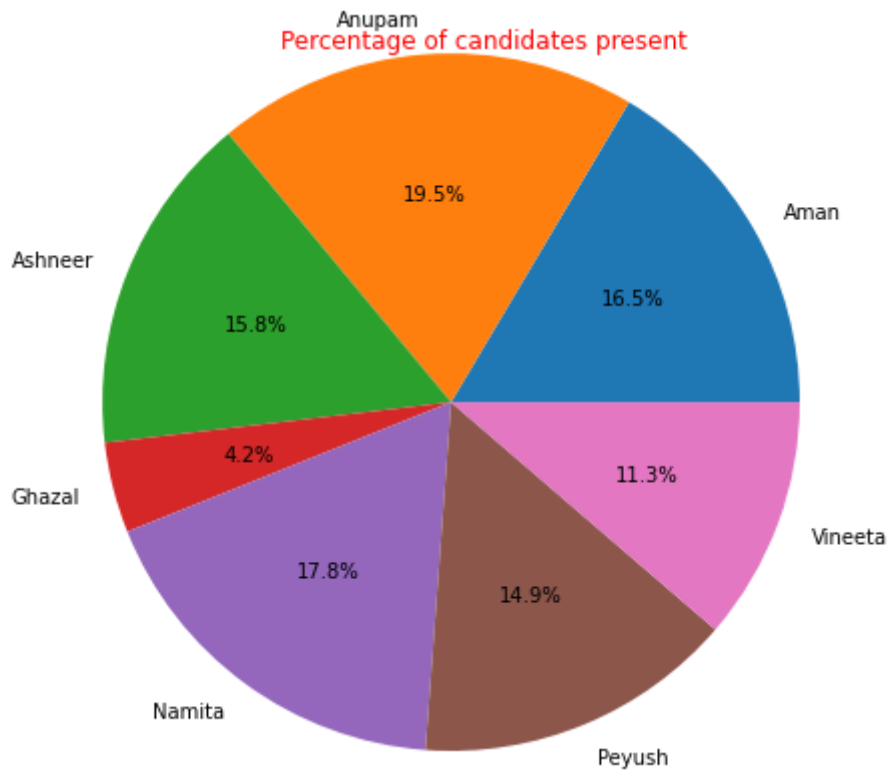
In [28]:

```
fig = plt.figure(figsize = (10, 5))
present = [aman_present, anupam_present, ashneer_present, ghazal_present,
            namita_present, peyush_present, vineeta_present]
names = ['Aman', 'Anupam', 'Ashneer', 'Ghazal', 'Namita', 'Peyush', 'Vineeta']
plt.bar(names, present, color = 'maroon', width = 0.4)
plt.xlabel("Candidate Name")
plt.ylabel("Candidate Present")
plt.title("Candidate Present vs Name")
plt.show()
```



In [32]:

```
plt.pie(present, labels = names, radius = 2.0, autopct = '%0.1f%%')  
plt.suptitle('Percentage of candidates present', x = 0.55,  
            y = 1.15, color = 'red')  
plt.show()
```



In [33]:

```
data['aman_invested'].value_counts()
```

Out[33]:

```
0    92  
1    29  
Name: aman_invested, dtype: int64
```

In [34]:

```
data['anupam_invested'].value_counts()
```

Out[34]:

```
0    97  
1    24  
Name: anupam_invested, dtype: int64
```

In [35]:



```
data['ashneer_invested'].value_counts()
```

Out[35]:

```
0    100
1     21
Name: ashneer_invested, dtype: int64
```

In [36]:



```
data['ghazal_invested'].value_counts()
```

Out[36]:

```
0    114
1     7
Name: ghazal_invested, dtype: int64
```

In [37]:



```
data['namita_invested'].value_counts()
```

Out[37]:

```
0     97
1     24
Name: namita_invested, dtype: int64
```

In [38]:



```
data['peyush_invested'].value_counts()
```

Out[38]:

```
0     93
1     28
Name: peyush_invested, dtype: int64
```

In [39]:



```
data['vineeta_invested'].value_counts()
```

Out[39]:

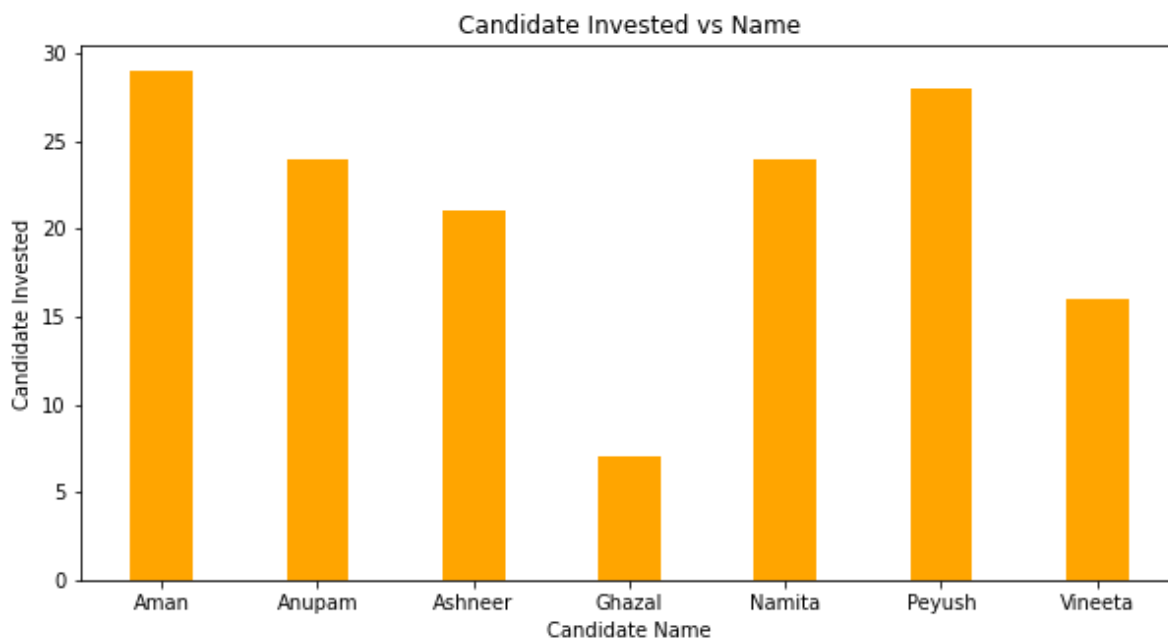
```
0    105
1     16
Name: vineeta_invested, dtype: int64
```

In [41]:

```
aman_invested = len(data[data.aman_invested == 1])
anupam_invested = len(data[data.anupam_invested == 1])
ashneer_invested = len(data[data.ashneer_invested == 1])
ghazal_invested = len(data[data.ghazal_invested == 1])
namita_invested = len(data[data.namita_invested == 1])
peyush_invested = len(data[data.peyush_invested == 1])
vineeta_invested = len(data[data.vineeta_invested == 1])
```

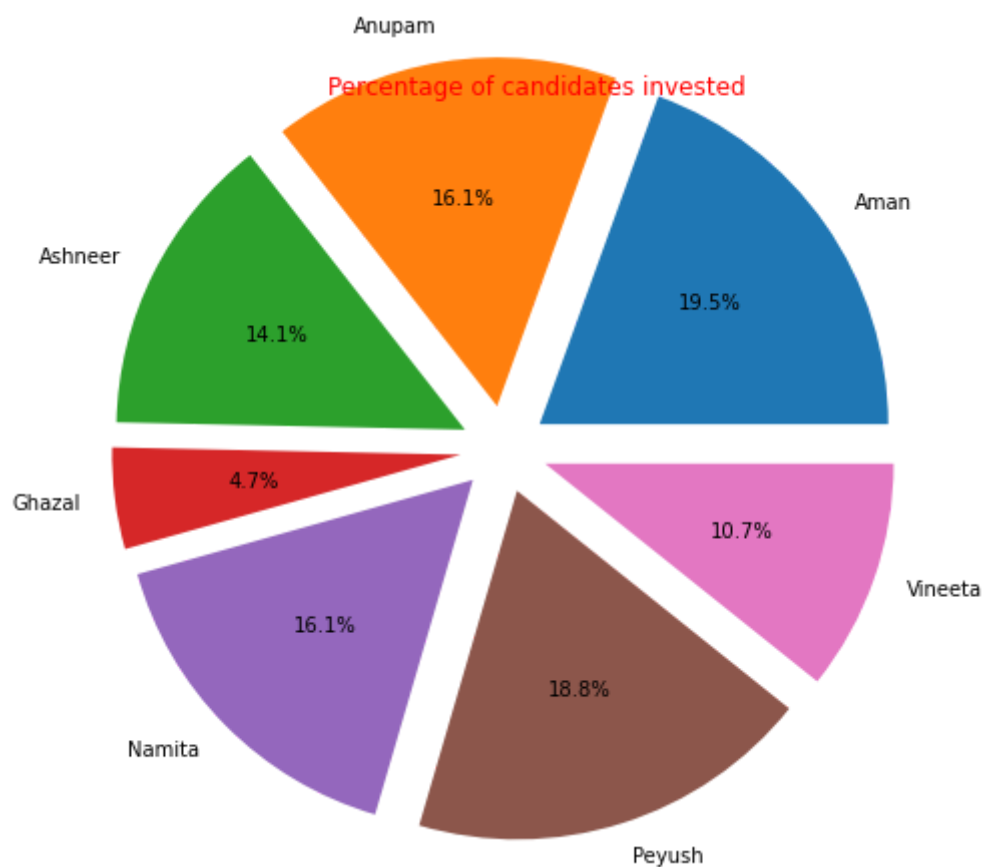
In [42]:

```
fig = plt.figure(figsize = (10, 5))
invested = [aman_invested, anupam_invested, ashneer_invested, ghazal_invested,
            namita_invested, peyush_invested, vineeta_invested]
names = ['Aman', 'Anupam', 'Ashneer', 'Ghazal', 'Namita', 'Peyush', 'Vineeta']
plt.bar(names, invested, color = 'orange', width = 0.4)
plt.xlabel("Candidate Name")
plt.ylabel("Candidate Invested")
plt.title("Candidate Invested vs Name")
plt.show()
```



In [44]:

```
plt.pie(invested, labels = names, radius = 2.0, autopct = '%0.1f%',  
        explode = [0.25,0.25,0.25,0.25,0.25,0.25,0.25])  
plt.suptitle('Percentage of candidates invested', x = 0.55,  
            y = 1.15, color = 'red')  
plt.show()
```

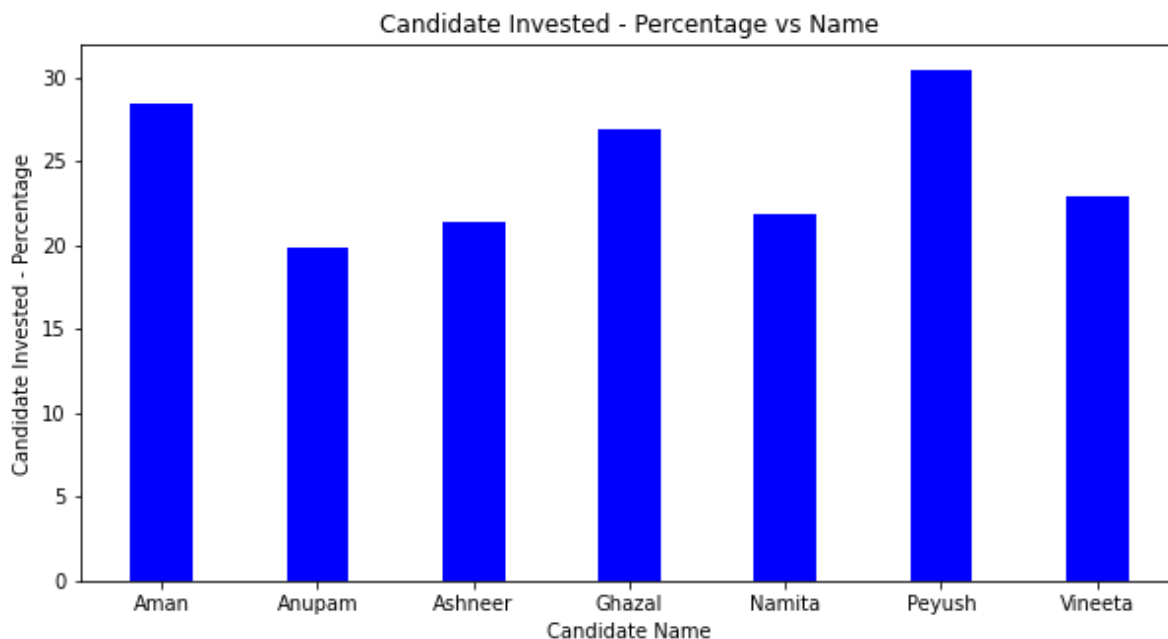


In [45]:

```
#Percent of investments
aman_percent = (aman_invested/aman_present)*100
anupam_percent = (anupam_invested/anupam_present)*100
ashneer_percent = (ashneer_invested/ashneer_present)*100
ghazal_percent = (ghazal_invested/ghazal_present)*100
namita_percent = (namita_invested/namita_present)*100
peyush_percent = (peyush_invested/peyush_present)*100
vineeta_percent = (vineeta_invested/vineeta_present)*100
```

In [47]:

```
fig = plt.figure(figsize = (10, 5))
percentage = [aman_percent, anupam_percent, ashneer_percent, ghazal_percent,
              namita_percent, peyush_percent, vineeta_percent]
names = ['Aman', 'Anupam', 'Ashneer', 'Ghazal', 'Namita', 'Peyush', 'Vineeta']
plt.bar(names, percentage, color = 'blue', width = 0.4)
plt.xlabel("Candidate Name")
plt.ylabel("Candidate Invested - Percentage")
plt.title("Candidate Invested - Percentage vs Name")
plt.show()
```



In [48]:

```
plt.pie(percentage, labels = names, radius = 2.0, autopct = '%0.1f%%',  
        explode = [0.25,0.25,0.25,0.25,0.25,0.25,0.25])  
plt.show()
```

