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_pe
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]:

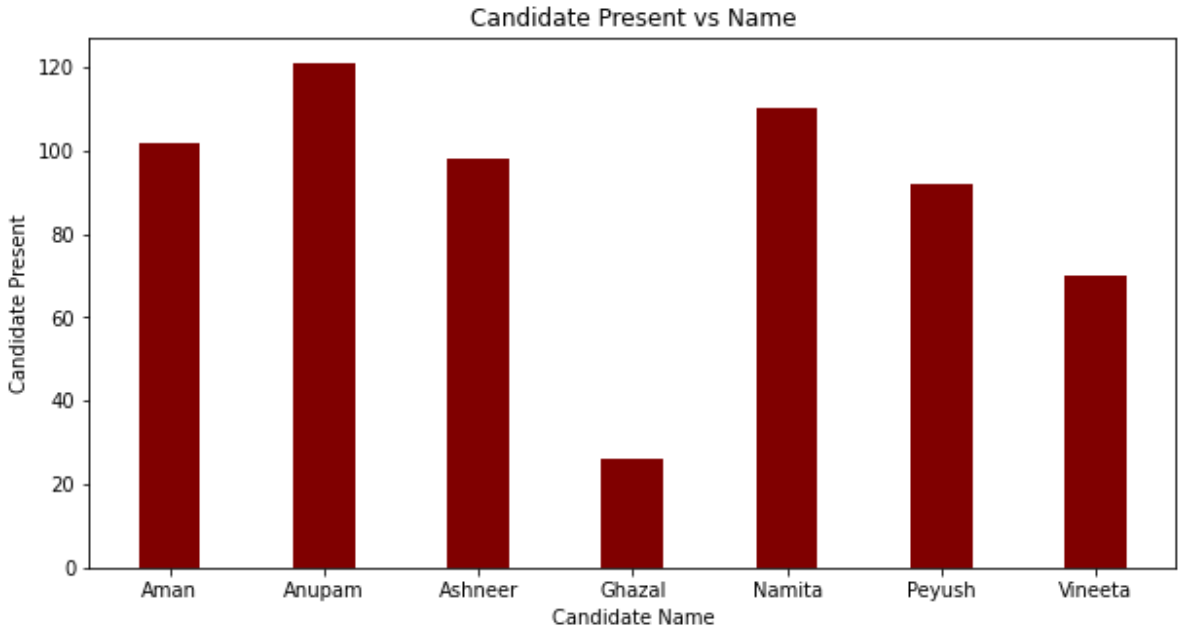
```
1    110
0     11
Name: namita_present, dtype: int64
```

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])
```

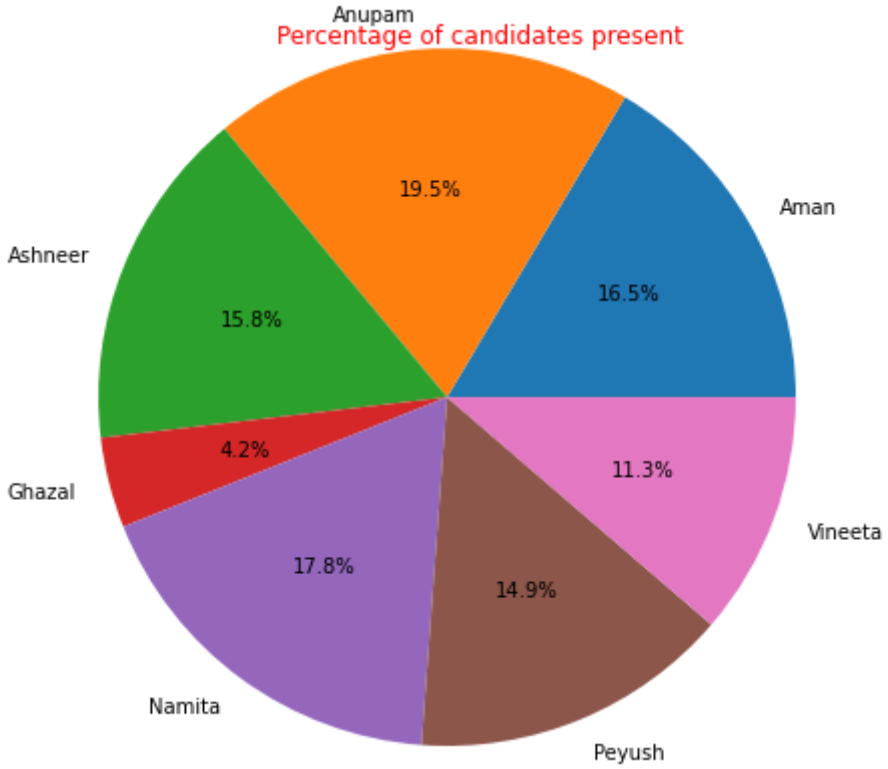
In [28]:

```
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]:

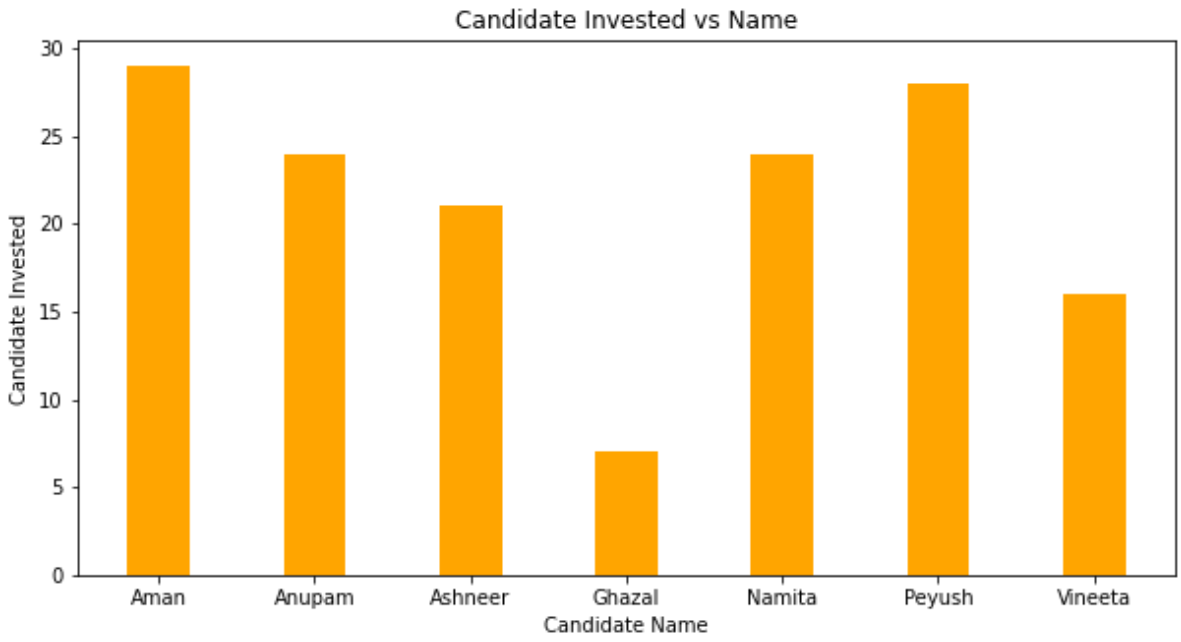
```
0    105
1     16
Name: vineeta_invested, dtype: int64
```

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])
```

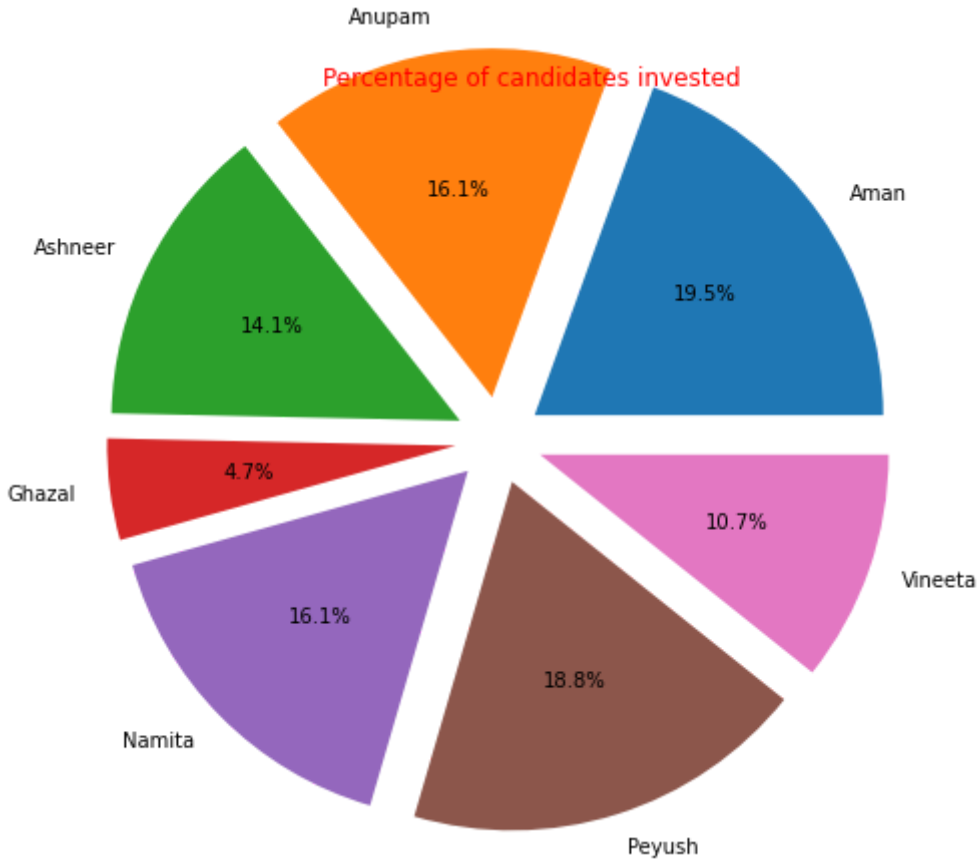
In [42]:

```
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()
```

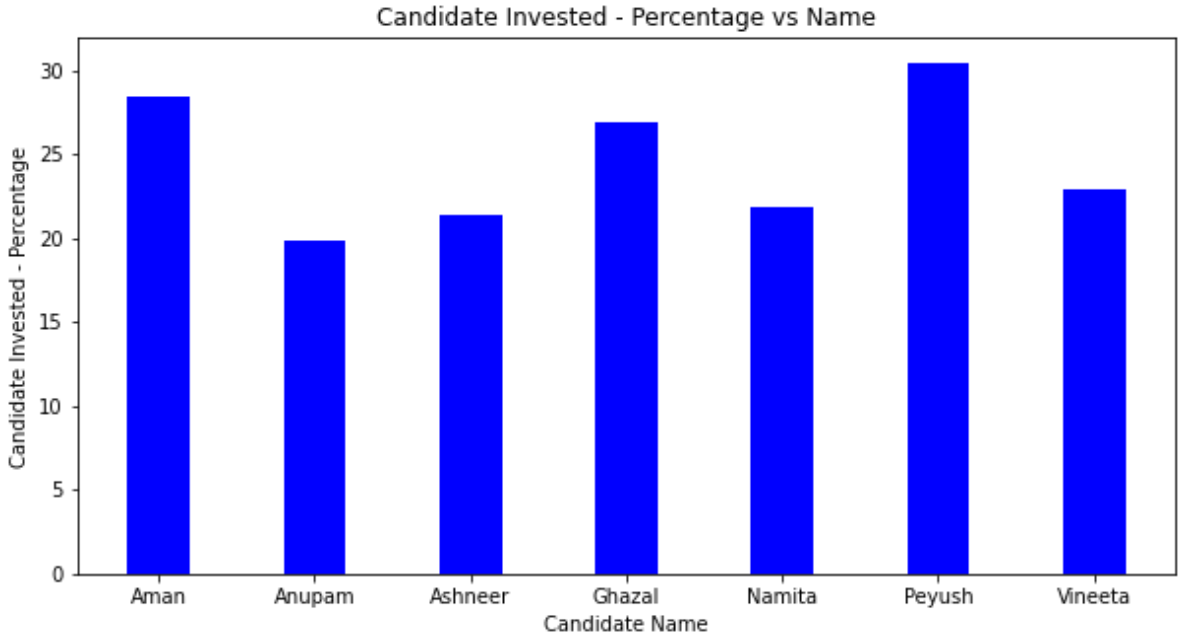


In [45]:

```
#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()
```