

In [2]:

```
import matplotlib.pyplot as plt
import pandas as pd
```

In [3]:

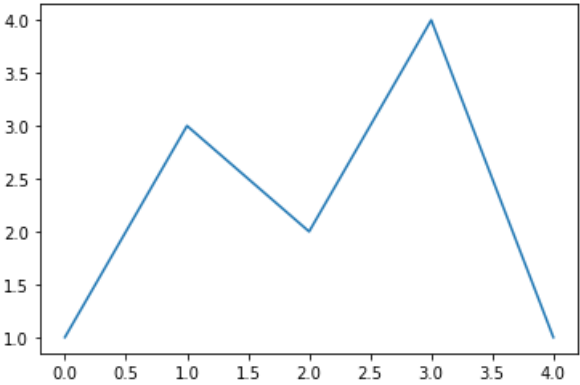
```
df = pd.read_csv('Independence100.csv')
df.dropna(axis = 1,inplace = True)
df.head()
```

Out[3]:

	Rank	Restaurant	Sales	Average Check	City	State	Meals Served
0	1	Carmine's (Times Square)	39080335.0	40	New York	N.Y.	469803.0
1	2	The Boathouse Orlando	35218364.0	43	Orlando	Fla.	820819.0
2	3	Old Ebbitt Grill	29104017.0	33	Washington	D.C.	892830.0
3	4	LAVO Italian Restaurant & Nightclub	26916180.0	90	New York	N.Y.	198500.0
4	5	Bryant Park Grill & Cafe	26900000.0	62	New York	N.Y.	403000.0

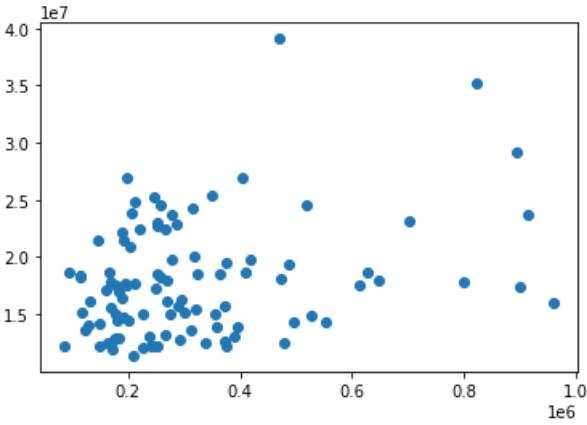
In [4]:

```
plt.plot([1,3,2,4,1])
plt.show()
```



In [10]:

```
plt.scatter(x = df['Meals Served'], y = df['Sales'])
plt.show()
```

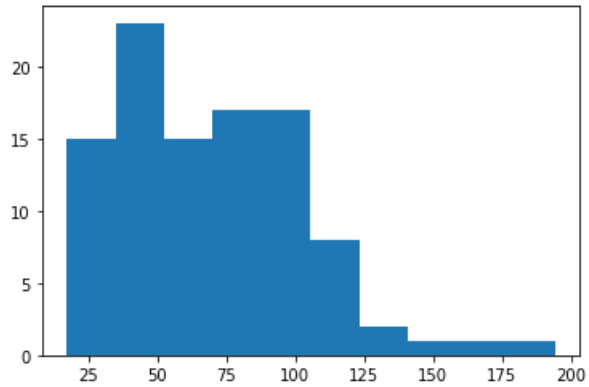


In [6]:

```
plt.hist(df['Average Check'])
```

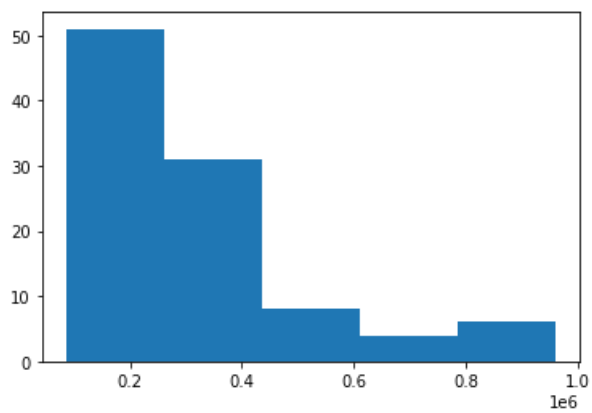
Out[6]:

```
(array([15., 23., 15., 17., 17., 8., 2., 1., 1., 1.]),  
array([ 17. , 34.7, 52.4, 70.1, 87.8, 105.5, 123.2, 140.9, 158.6,  
       176.3, 194. ]),  
<BarContainer object of 10 artists>)
```



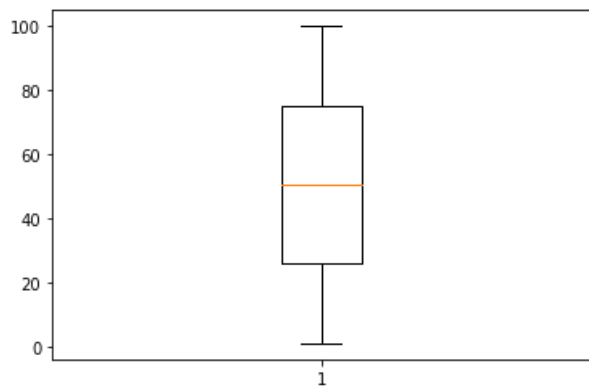
In [7]:

```
plt.hist(df['Meals Served'], bins = 5)  
plt.show()
```



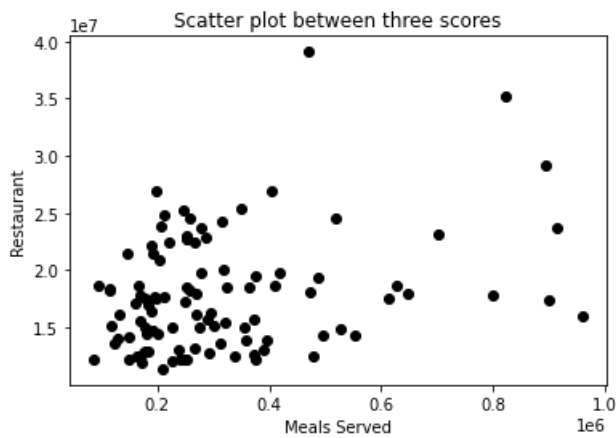
In [12]:

```
plt.boxplot(df['Rank'])  
plt.show()
```



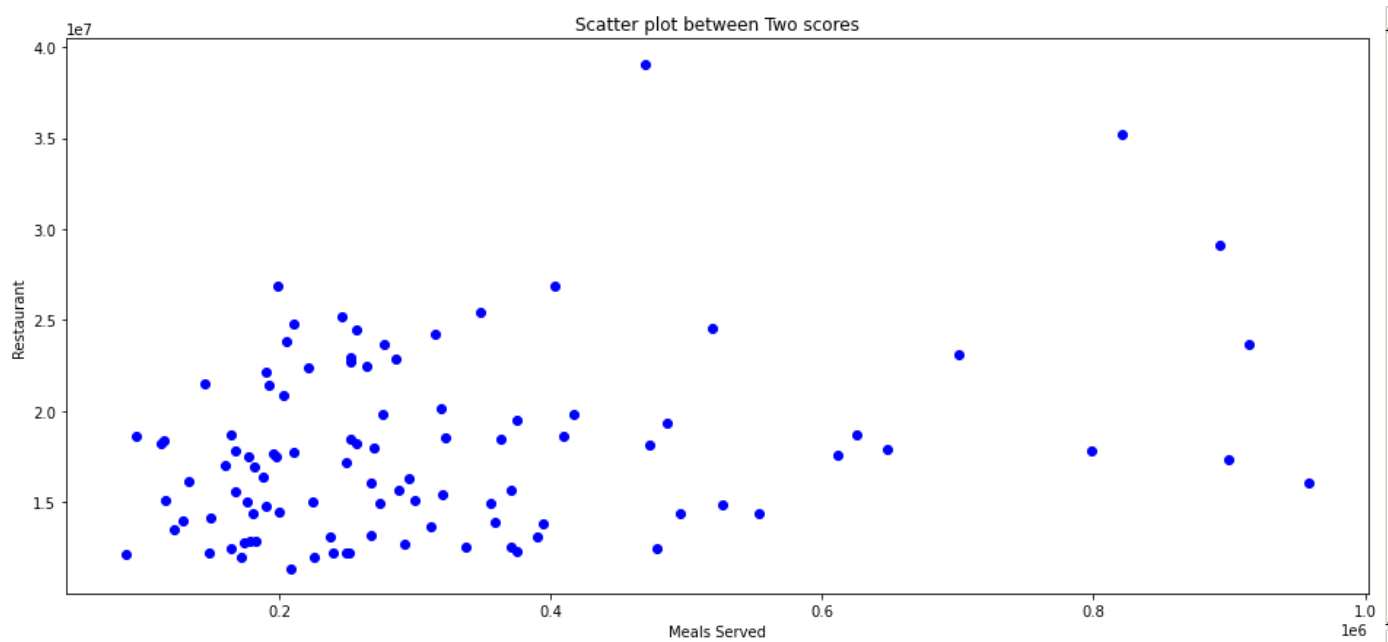
In [11]:

```
plt.scatter(x = df['Meals Served'], y = df['Sales'], color = 'black')  
plt.xlabel('Meals Served')  
plt.ylabel('Restaurant')  
plt.title('Scatter plot between three scores')  
plt.show()
```



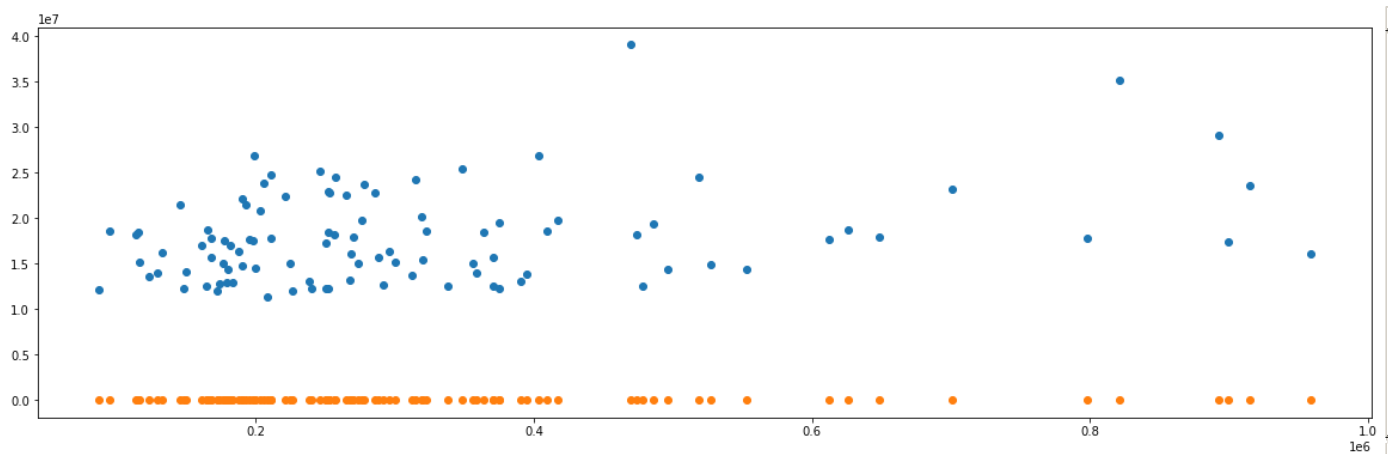
In [15]:

```
plt.figure(figsize=(16,7))
plt.scatter(x = df['Meals Served'], y = df['Sales'], color = 'blue')
plt.xlabel('Meals Served')
plt.ylabel('Restaurant')
plt.title('Scatter plot between Two scores')
plt.show()
```



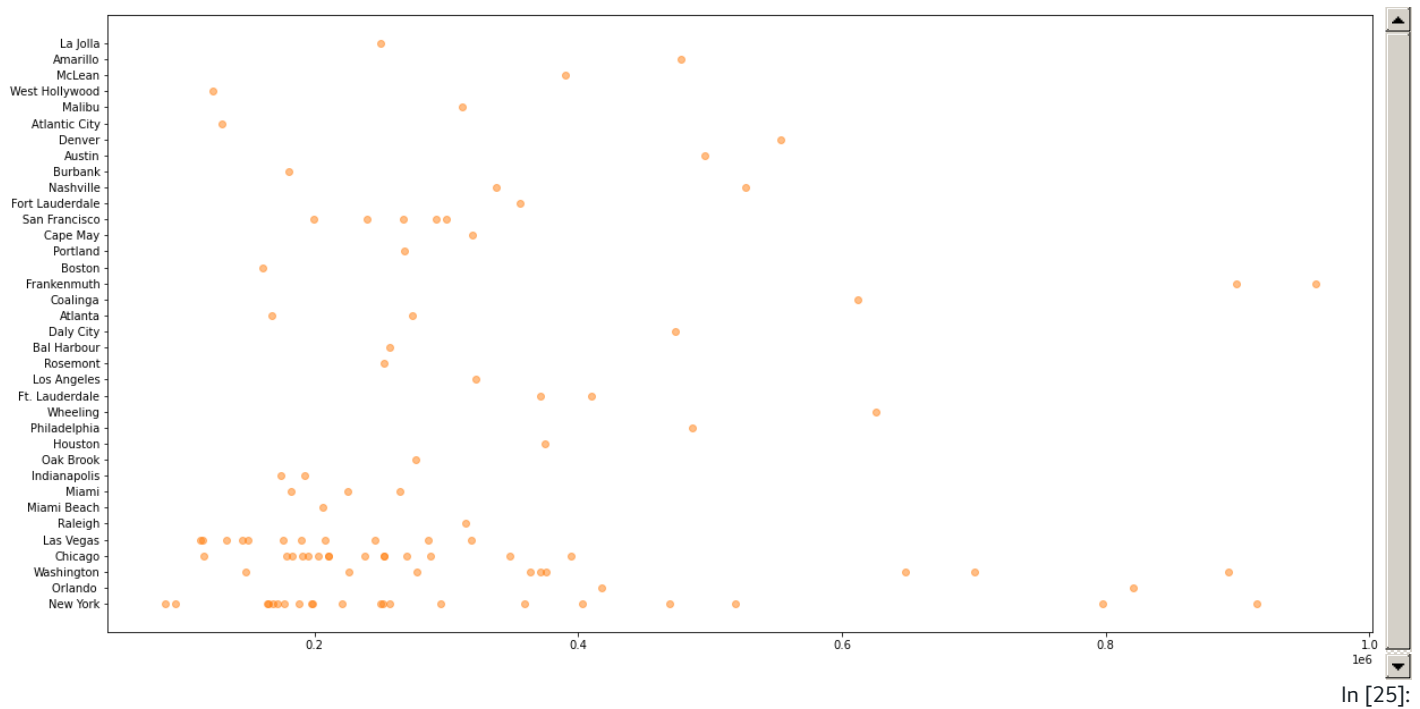
In [17]:

```
plt.figure(figsize=(20,6))
plt.scatter(x = df['Meals Served'], y = df['Sales'])
plt.scatter(x = df['Meals Served'], y = df['Rank'])
plt.show()
```



In [23]:

```
plt.figure(figsize=(20,10))
plt.scatter(x = df['Meals Served'], y = df['Sales'], alpha = 0.5)
plt.scatter(x = df['Meals Served'], y = df['City'], alpha = 0.5)
plt.show()
```



```
plt.figure(figsize=(25,10))
plt.scatter(x = df['Meals Served'], y = df['Restaurant'], alpha = 1, label = ' Rank')
plt.scatter(x = df['Meals Served'], y = df['Average Check'],alpha = 1, label = ' Sales ')
plt.legend()
plt.show()
```

