Experiment 5

In [1]:
```
import matplotlib.pyplot as plt
import pandas as pd
```

In [2]:
```
data = [11, 22, 20, 14, 29, 8, 35, 27, 13, 48, 10, 24, 17]
```

In [3]:
```
data
```

Out[3]:
```
[11, 22, 20, 14, 29, 8, 35, 27, 13, 48, 10, 24, 17]
```

In [4]:
```
df = pd.DataFrame(data)
```

In [5]:
```
df
```

Out[5]:

	0
0	11
1	22
2	20
3	14
4	29
5	8
6	35
7	27
8	13
9	48
10	10
11	24
12	17

In [6]:
```
data_sort = df.sort_values(by = [0])
```

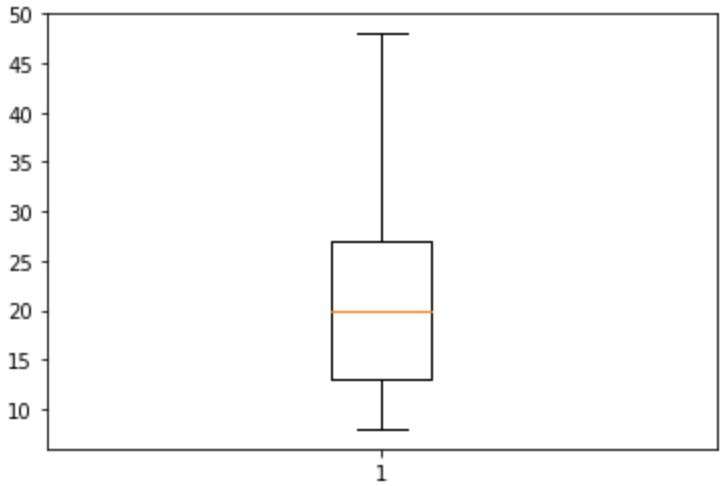
In [7]:
```
data_sort
```

Out[7]:

	0
5	8
10	10
0	11
8	13
3	14
12	17
2	20
1	22

11	24
7	27
4	29
6	35
9	48

In [8]:
```
plt.boxplot(data_sort)
plt.show()
```



In [10]:
```
import os
dir = os.getcwd()
filename = dir + "/../assets/csv/tips.csv"
tips = pd.read_csv(filename)
```

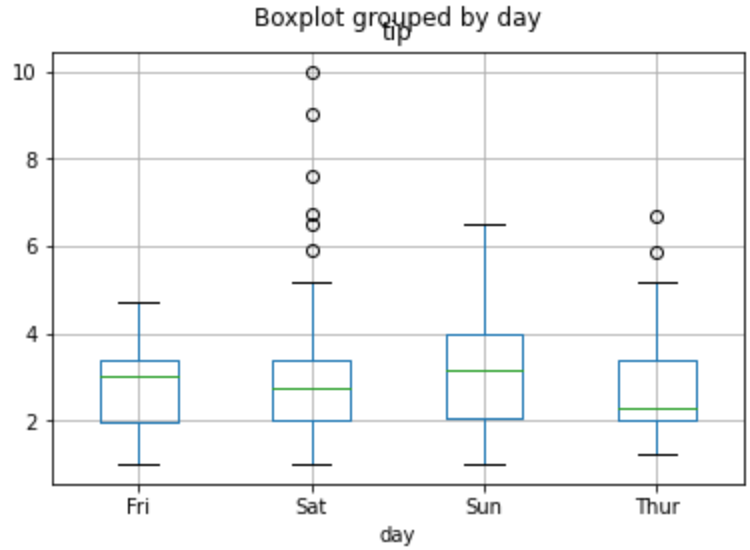
In [11]:
```
tips.head()
```

Out[11]:

	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4

In [12]:
```
tips.boxplot(by ='day', column =['tip'])
```

Out[12]:
```
<AxesSubplot: title={'center': 'tip'}, xlabel='day'>
```



In [ ]: