In [1]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

In [2]:
```
dataset = pd.read_csv('titanic.CSV')
```

In [3]:
```
dataset.head(3)
```

Out[3]:

	Survived	Pclass	Name	Sex	Age	Siblings/Spouses Aboard	Parents/Children Aboard	Fare
0	0	3	Mr. Owen Harris Braund	male	22.0	1	0	7.2500
1	1	1	Mrs. John Bradley (Florence Briggs Thayer) Cum...	female	38.0	1	0	71.2833
2	1	3	Miss. Laina Heikkinen	female	26.0	0	0	7.9250

In [5]:
```
dataset.isnull().sum()
```

Out[5]:
```
Survived                  0
Pclass                    0
Name                      0
Sex                       0
Age                       0
Siblings/Spouses Aboard   0
Parents/Children Aboard   0
Fare                      0
dtype: int64
```

In [ ]:
```
# So no null value is present in above data
```

In [7]:
```
np.percentile(dataset['Age'], 25), np.percentile(dataset['Age'], 75)
```

Out[7]:
```
(20.25, 38.0)
```

In [13]:
```
np.percentile(dataset['Age'], 0), np.percentile(dataset['Age'], 100), np.percentile
```

Out[13]:
```
(0.42, 80.0, 28.0)
```

In [14]:
```
dataset['Age'].min(), dataset['Age'].max(), dataset['Age'].median()
```

Out[14]:
```
(0.42, 80.0, 28.0)
```

In [16]:
```
# So in above 2 rows, min. age account for 0% percentile and max. age accounts for
# and median age is 50% percentile of age
```

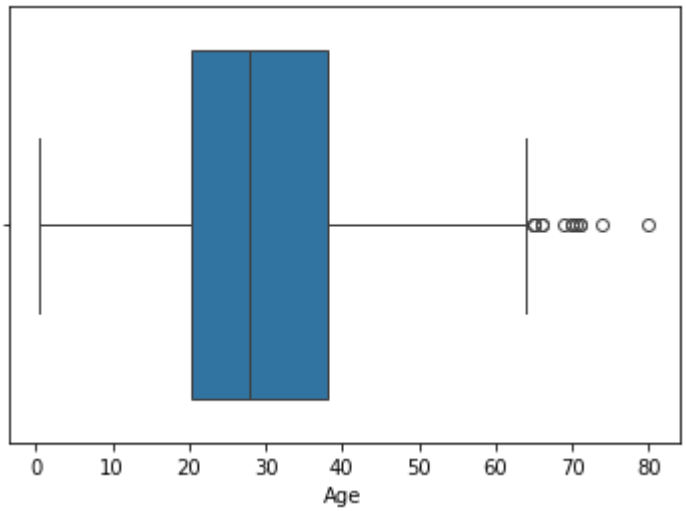
In [17]:
```
dataset.describe()
```

Out[17]:

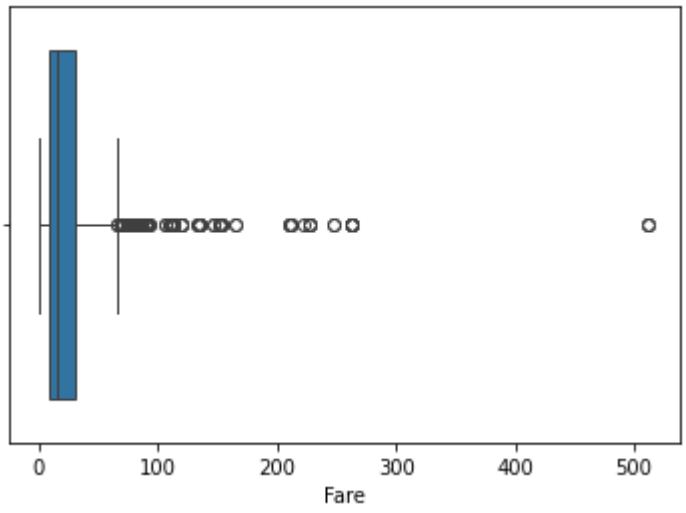
	Survived	Pclass	Age	Siblings/Spouses Aboard	Parents/Children Aboard	Fare
count	887.000000	887.000000	887.000000	887.000000	887.000000	887.00000
mean	0.385569	2.305524	29.471443	0.525366	0.383315	32.30542
std	0.487004	0.836662	14.121908	1.104669	0.807466	49.78204
min	0.000000	1.000000	0.420000	0.000000	0.000000	0.00000
25%	0.000000	2.000000	20.250000	0.000000	0.000000	7.92500
50%	0.000000	3.000000	28.000000	0.000000	0.000000	14.45420
75%	1.000000	3.000000	38.000000	1.000000	0.000000	31.13750
max	1.000000	3.000000	80.000000	8.000000	6.000000	512.32920

In [20]:
```
#If you see closely on age you can see that
# min(0%)      : 0.42
# Q1 : 25%     : 20.25
# Q2 : 50%     : 28.00
# Q3 : 75%     : 38.00
# Q4 : max(80%): 80.00
# So you can see the huge difference between Q3 and Q4. So it is clear that outlier
# Also difference between min (0%) and Q1 is significant larger, so there is also c
# median (Q2) is 28, so it is evident that the median is inclined towards left side
# So this whole analysis tell that there is definitely outlier present in this data
```

In [23]:
```
# To show it in the boxplot
sns.boxplot(x='Age', data=dataset)
plt.show()
```



In [25]:
```
# To show it in the boxplot
sns.boxplot(x='Fare', data=dataset)
plt.show()
```



In [ ]:

In [ ]: