

In [1]:

```
import matplotlib.pyplot as plt
```

In [2]:

```
%matplotlib inline
```

In [3]:

```
import pandas as pd
```

In [4]:

```
df = pd.read_csv("https://raw.githubusercontent.com/AmenaNajeeb/Data/master/CardioGoodFitness.csv")
```

In [5]:

```
df.head(10)
```

Out[5]:

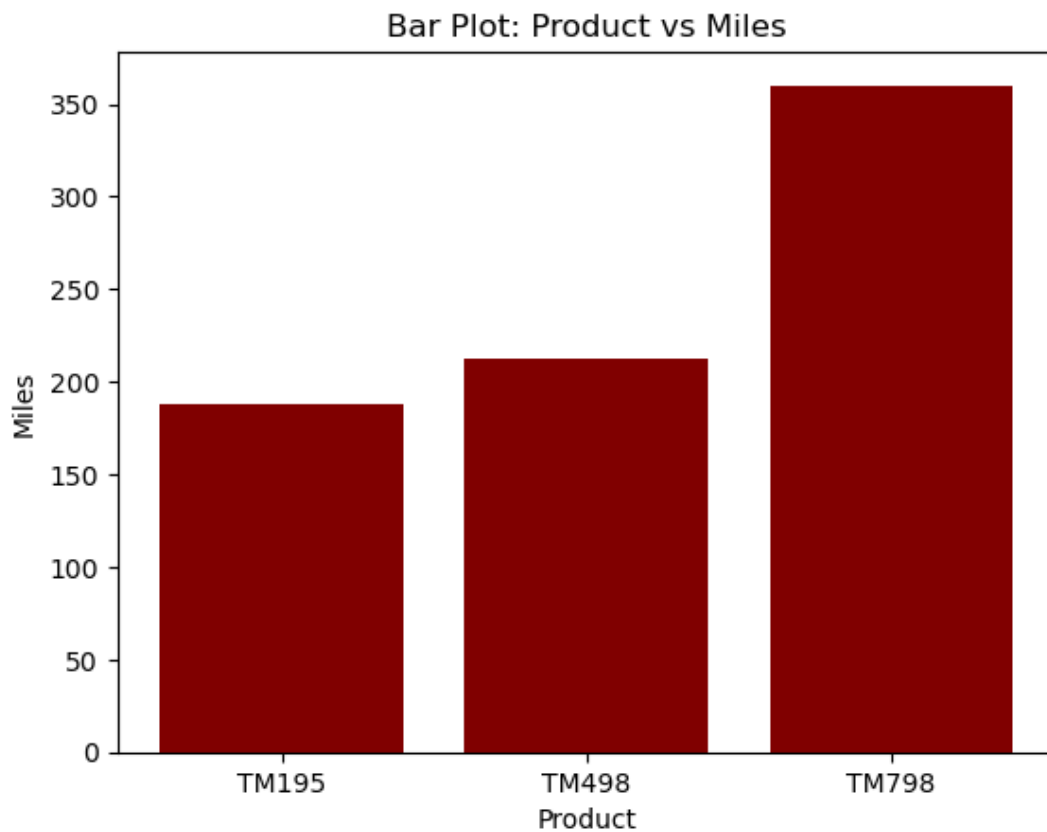
	Product	Age	Gender	Education	MaritalStatus	Usage	Fitness	Income	Miles
0	TM195	18	Male	14	Single	3	4	29562	112
1	TM195	19	Male	15	Single	2	3	31836	75
2	TM195	19	Female	14	Partnered	4	3	30699	66
3	TM195	19	Male	12	Single	3	3	32973	85
4	TM195	20	Male	13	Partnered	4	2	35247	47
5	TM195	20	Female	14	Partnered	3	3	32973	66
6	TM195	21	Female	14	Partnered	3	3	35247	75
7	TM195	21	Male	13	Single	3	3	32973	85
8	TM195	21	Male	15	Single	5	4	35247	141
9	TM195	21	Female	15	Partnered	2	3	37521	85

In [42]:

```
plt.bar(df["Product"],df["Miles"],color='#800000')  
plt.xlabel("Product")  
plt.ylabel("Miles")  
plt.title("Bar Plot: Product vs Miles")
```

Out[42]:

Text(0.5, 1.0, 'Bar Plot: Product vs Miles')

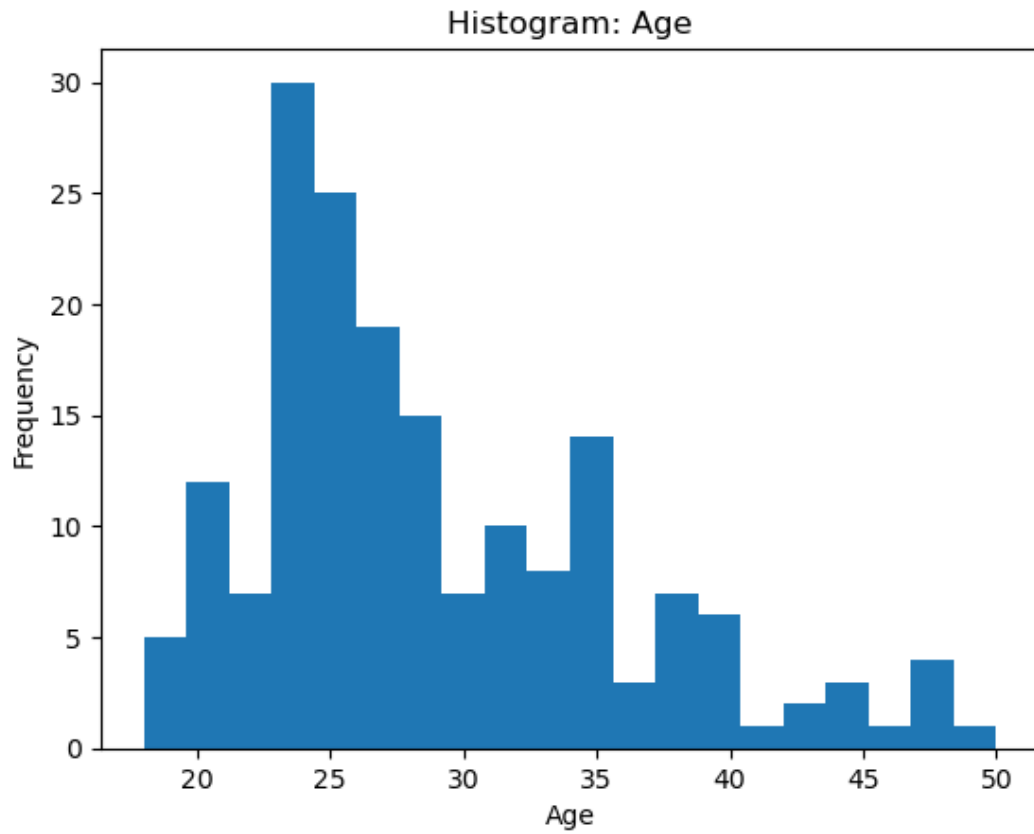


In [57]:

```
plt.hist(df["Age"],bins=20)  
plt.xlabel("Age")  
plt.ylabel("Frequency")  
plt.title("Histogram: Age")  
# Age 20 frequency = 5
```

Out[57]:

Text(0.5, 1.0, 'Histogram: Age')

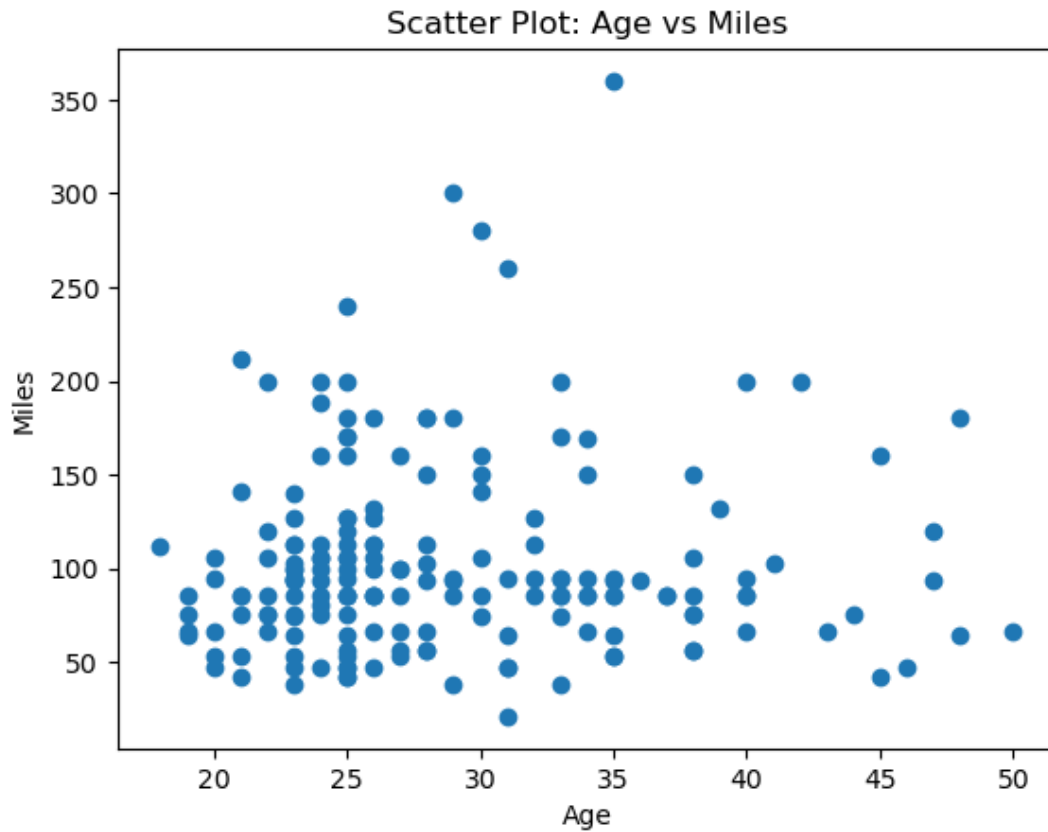


In [40]:

```
plt.scatter(df['Age'],df['Miles'])  
plt.xlabel("Age")  
plt.ylabel("Miles")  
plt.title("Scatter Plot: Age vs Miles")
```

Out[40]:

Text(0.5, 1.0, 'Scatter Plot: Age vs Miles')

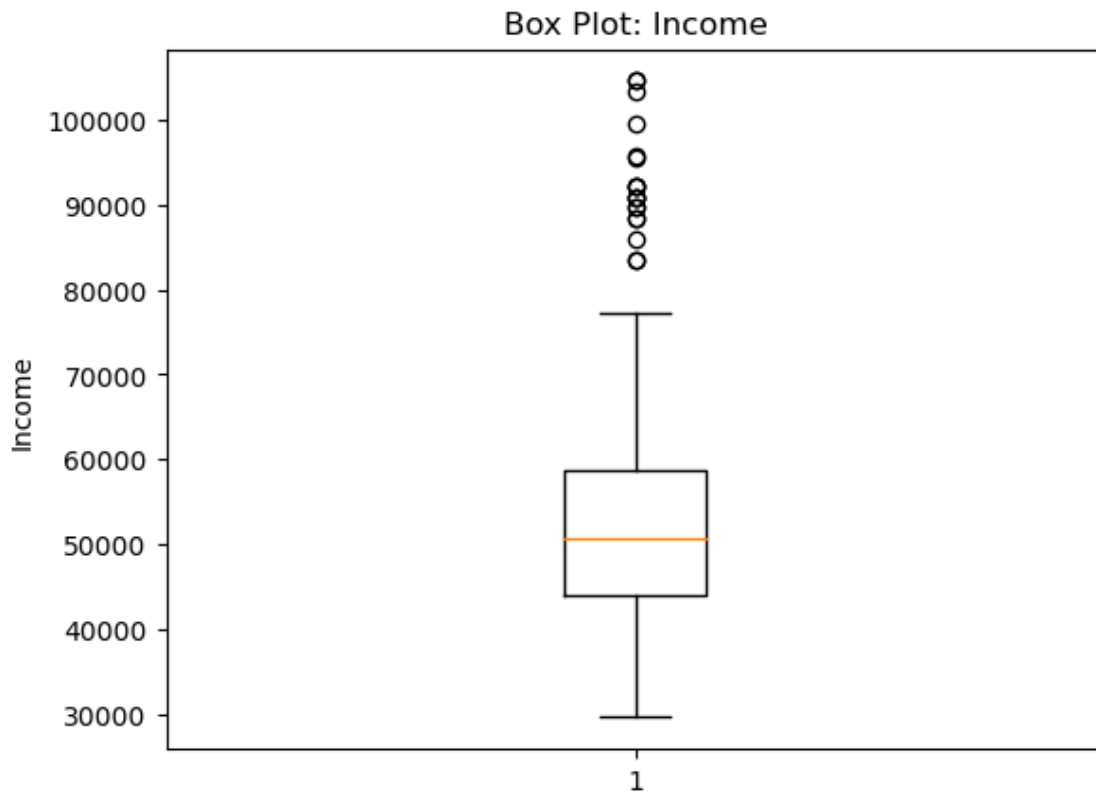


In [47]:

```
plt.boxplot(df["Income"],vert=True)
plt.ylabel("Income")
plt.title("Box Plot: Income")
# Median = 50000
# Upper Range = 58000-79000
# Third Quartile = 58000
```

Out[47]:

Text(0.5, 1.0, 'Box Plot: Income')



In [48]:

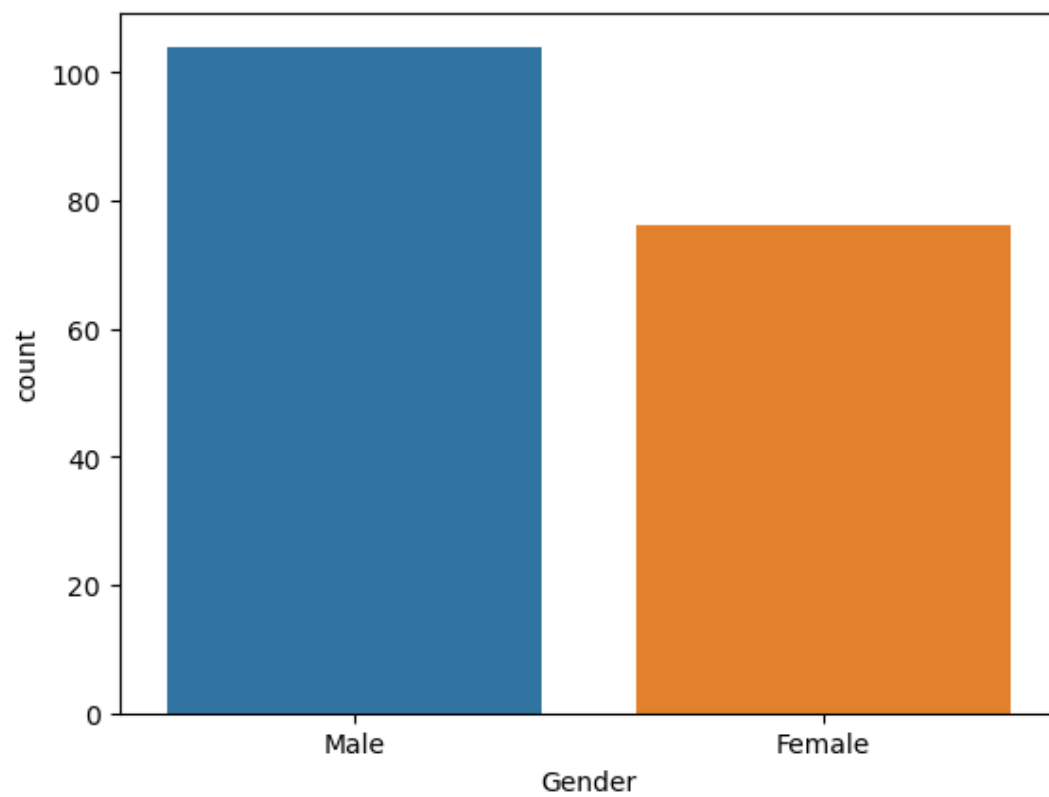
```
import seaborn as sns
```

In [49]:

```
sns.countplot(x=df["Gender"])
```

Out[49]:

<AxesSubplot:xlabel='Gender', ylabel='count'>

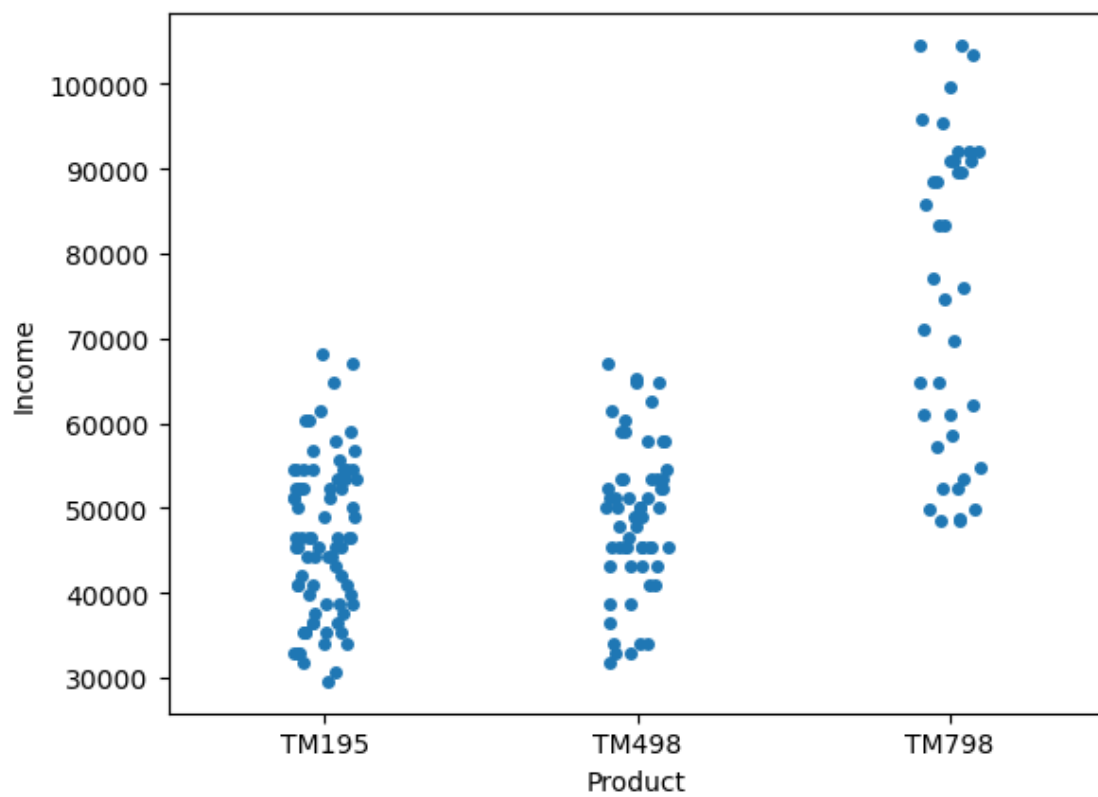


In [50]:

```
sns.stripplot(x=df["Product"],y=df["Income"])
```

Out[50]:

<AxesSubplot:xlabel='Product', ylabel='Income'>



In [51]:

```
sns.swarmplot(x=df["Gender"],y=df["Miles"])
```

Out[51]:

<AxesSubplot:xlabel='Gender', ylabel='Miles'>



In [52]:

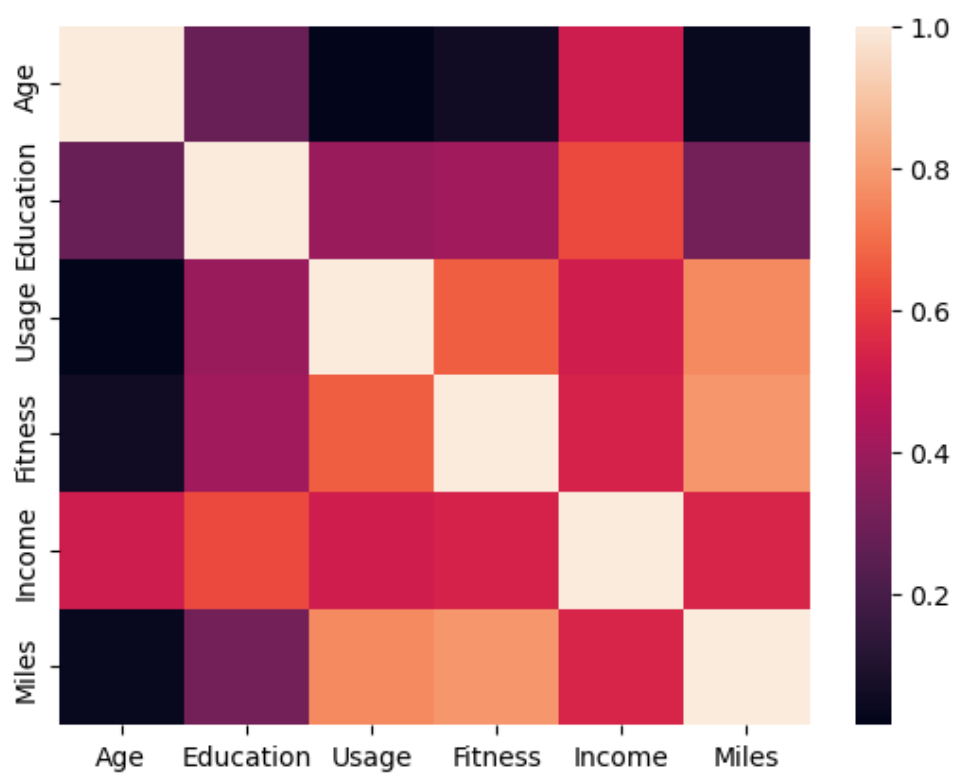
```
correlate = df.corr()
```


In [53]:

```
sns.heatmap(correlate)
```

Out[53]:

<AxesSubplot:>

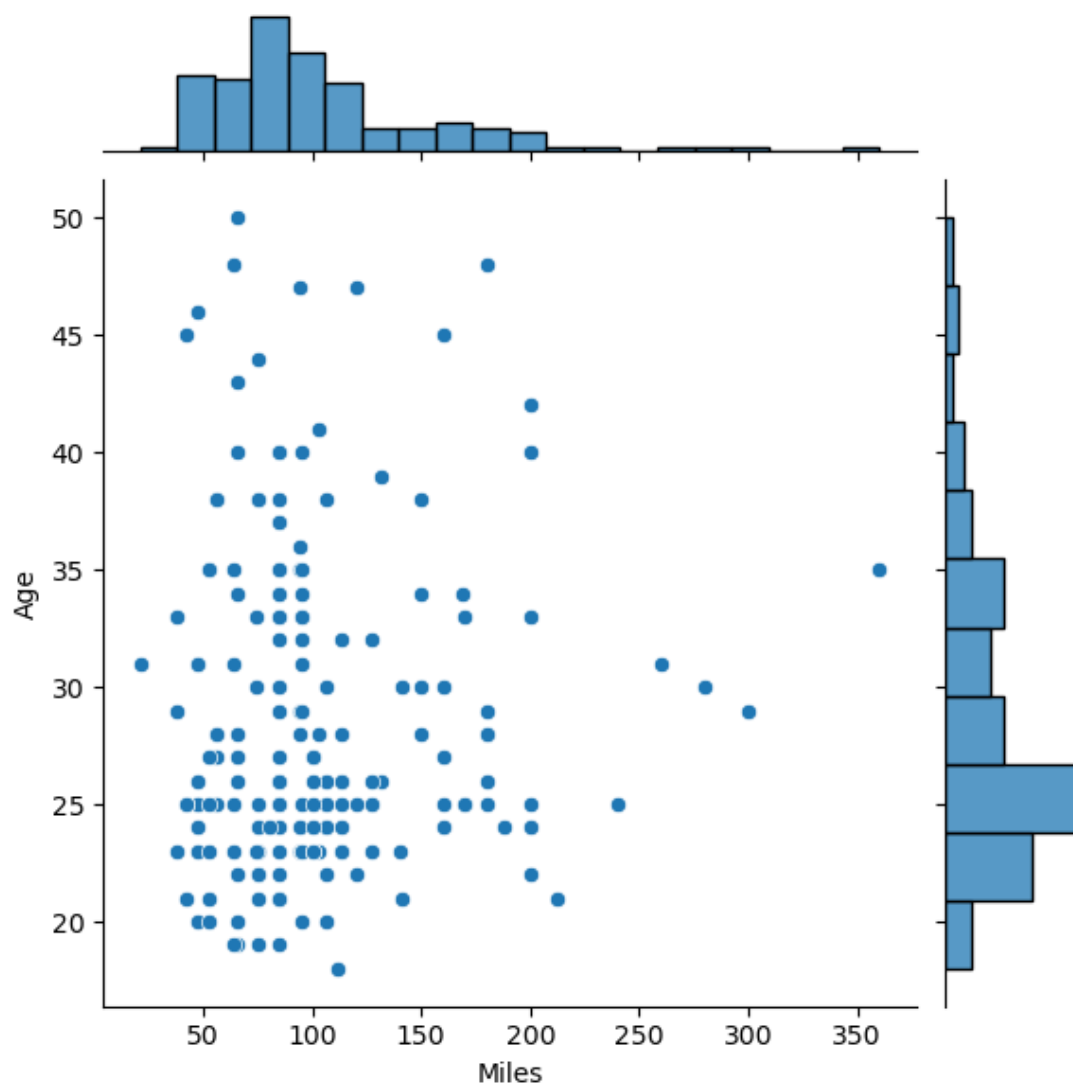


In [54]:

```
sns.jointplot(x='Miles',y='Age',data=df)
```

Out[54]:

<seaborn.axisgrid.JointGrid at 0x1d7c8dd47c0>

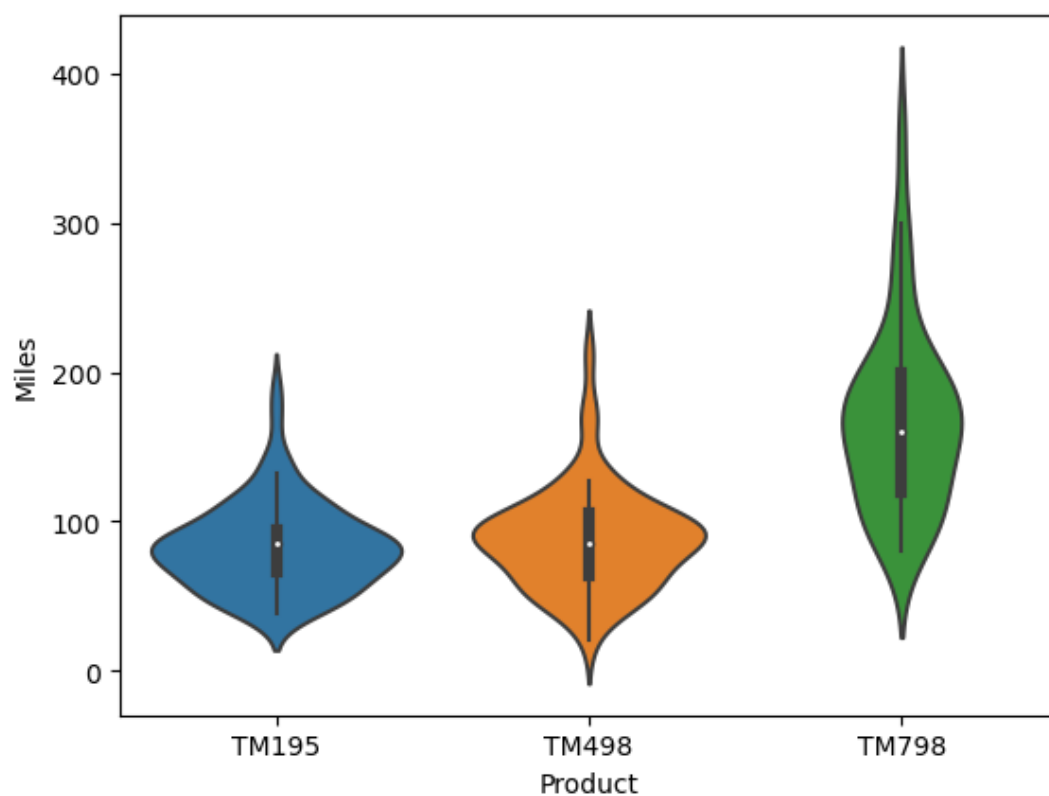


In [55]:

```
sns.violinplot(x='Product',y='Miles',data=df)
```

Out[55]:

<AxesSubplot:xlabel='Product', ylabel='Miles'>



In []: