

```
In [1]: #Import the diabetes dataset.
import seaborn as sns
import pandas as pd
import warnings
warnings.filterwarnings('ignore')
```

```
In [2]: df = pd.read_csv('diabetes.csv')
```

```
In [3]: #Read the top 5 records from dataset.
df.head()
```

```
Out[3]:
```

	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	BMI	DiabetesPedigreeFunction	Age	Outcome
0	6	148	72	35	0	33.6	0.627	50	1
1	1	85	66	29	0	26.6	0.351	31	0
2	8	183	64	0	0	23.3	0.672	32	1
3	1	89	66	23	94	28.1	0.167	21	0
4	0	137	40	35	168	43.1	2.288	33	1

```
In [4]: #Generate heatmap for diabetes dataset.
sns.heatmap(df.corr(),annot=True,cmap='ocean')
```

 **Jupyter** Task no 7 Last Checkpoint: 9 hours ago (autosaved)

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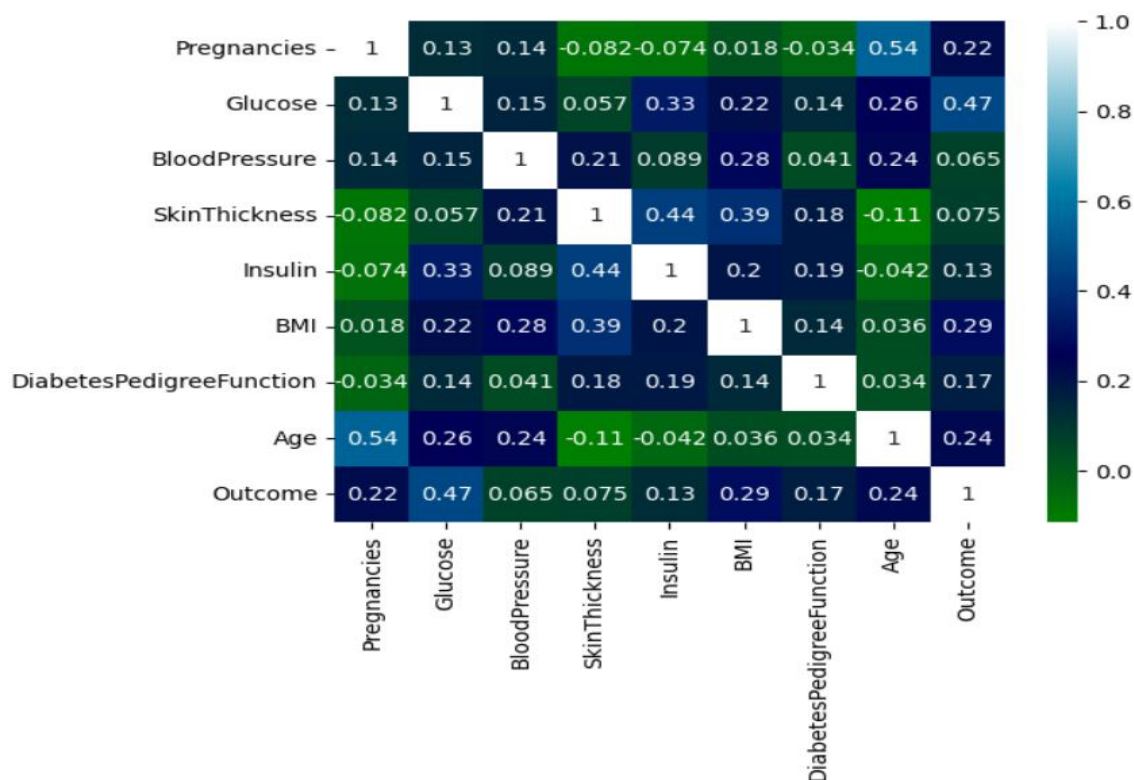






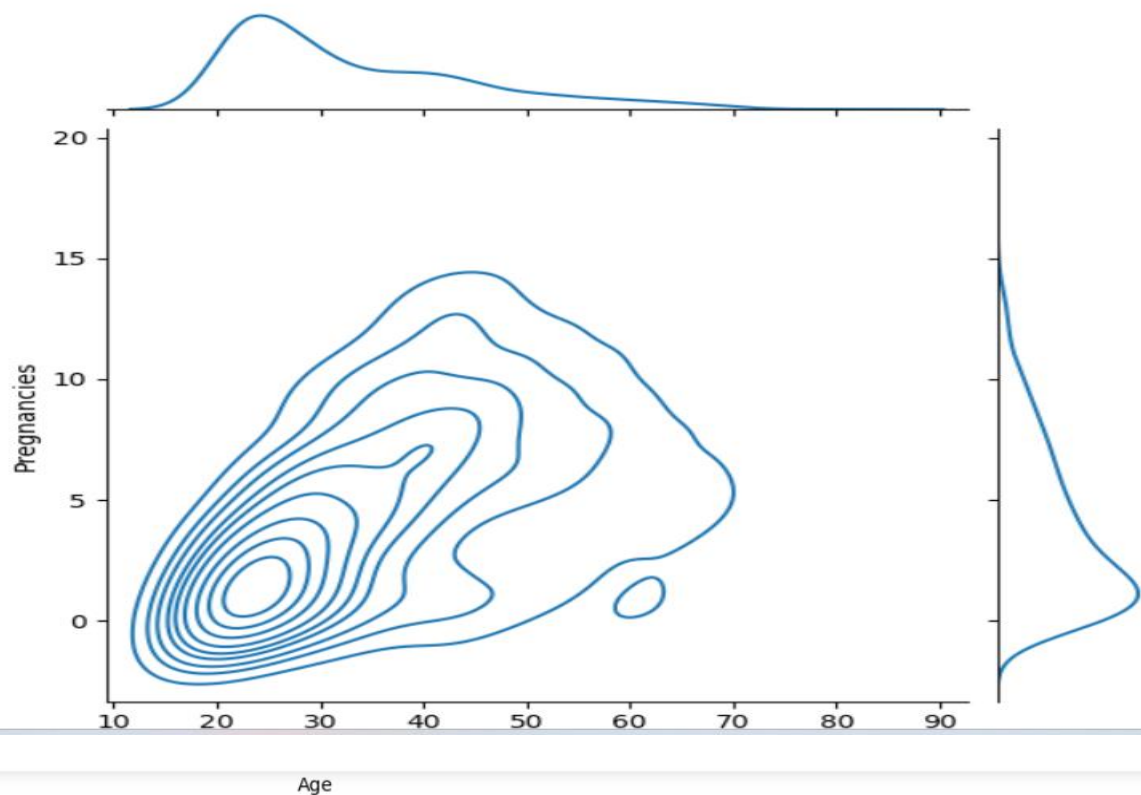
Code

Out[4]: <Axes: >



```
In [5]: #Generate Jointplot for age vs pregnancy.  
sns.jointplot(x='Age',y='Pregnancies',data=df,kind='kde')
```

```
Out[5]: <seaborn.axisgrid.JointGrid at 0x251183459d0>
```

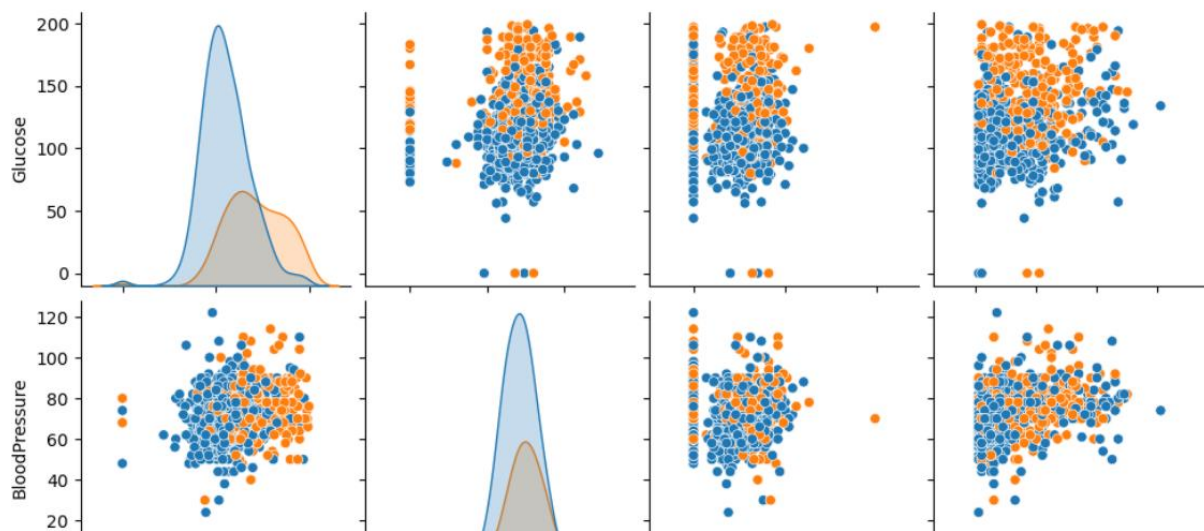


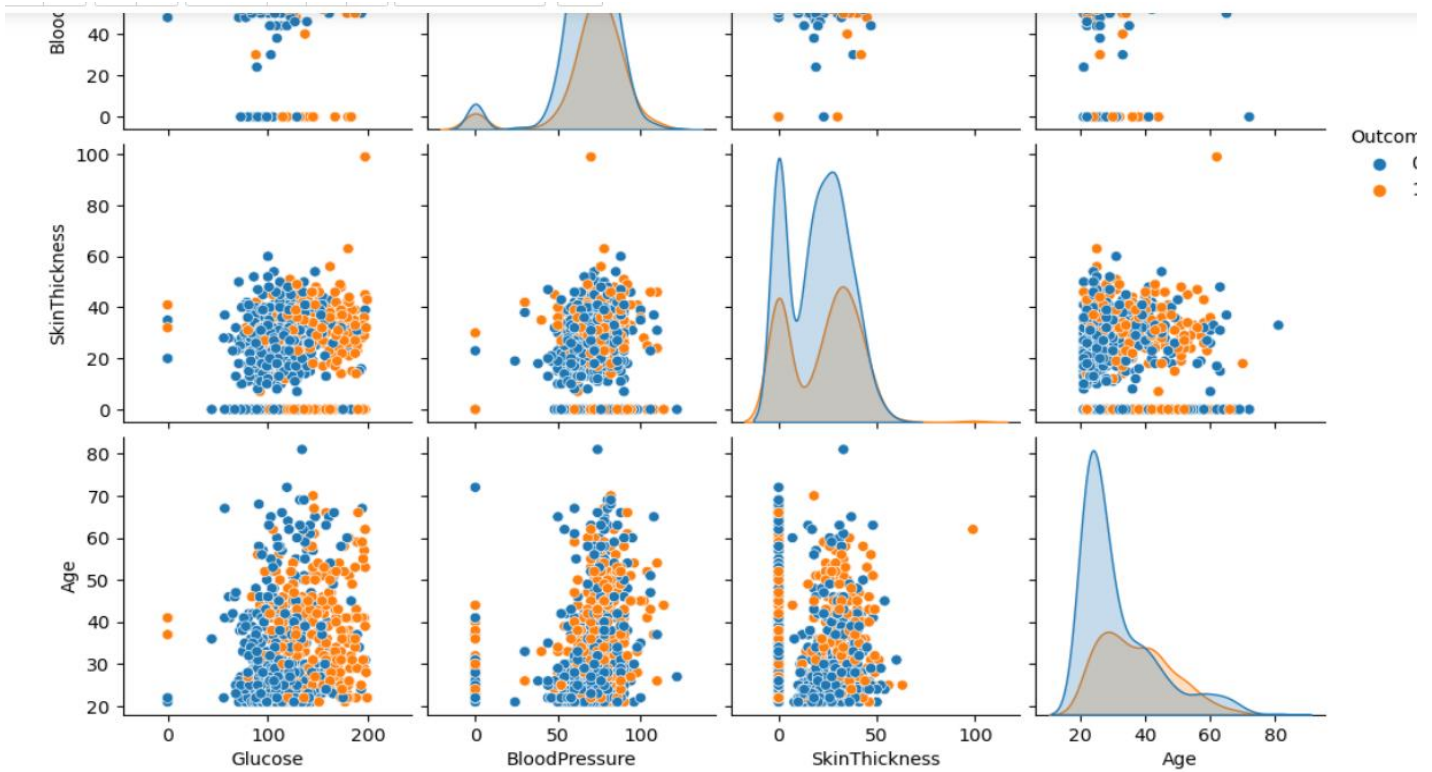
```
In [6]: df.columns
```

```
Out[6]: Index(['Pregnancies', 'Glucose', 'BloodPressure', 'SkinThickness', 'Insulin',  
              'BMI', 'DiabetesPedigreeFunction', 'Age', 'Outcome'],  
              dtype='object')
```

```
In [7]: #Generate pairplot for diabetes dataset.  
sns.pairplot(df[['Glucose', 'BloodPressure', 'SkinThickness', 'Age', 'Outcome']],hue='Outcome')
```

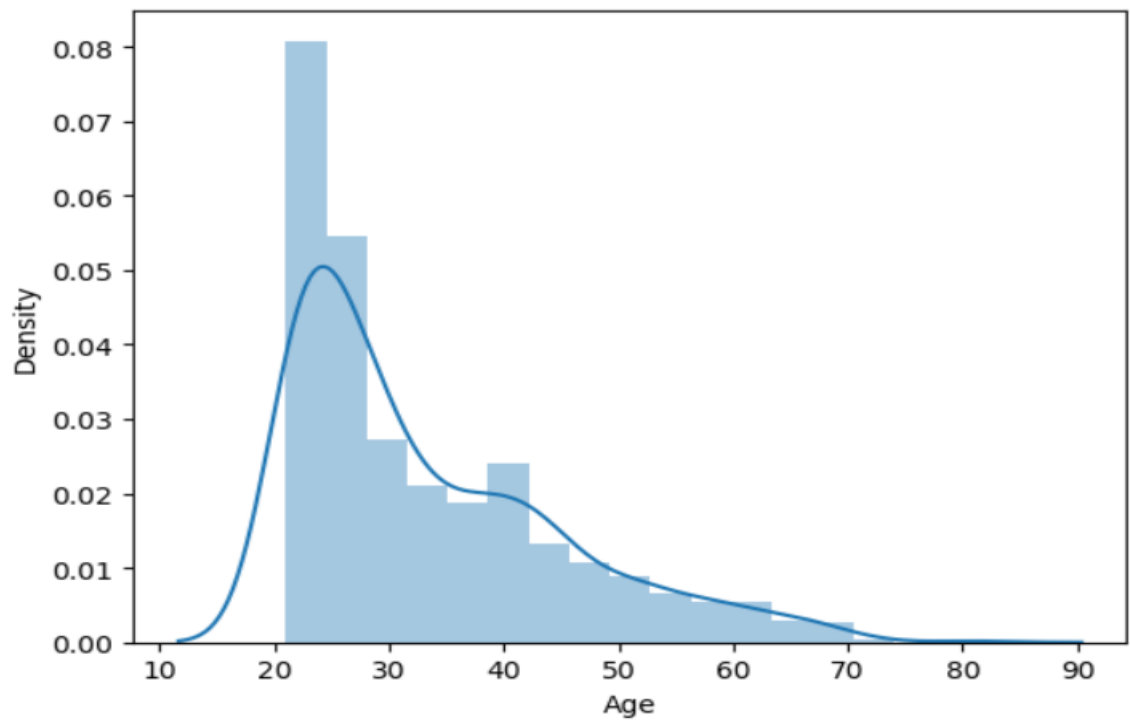
```
Out[7]: <seaborn.axisgrid.PairGrid at 0x25118347dd0>
```





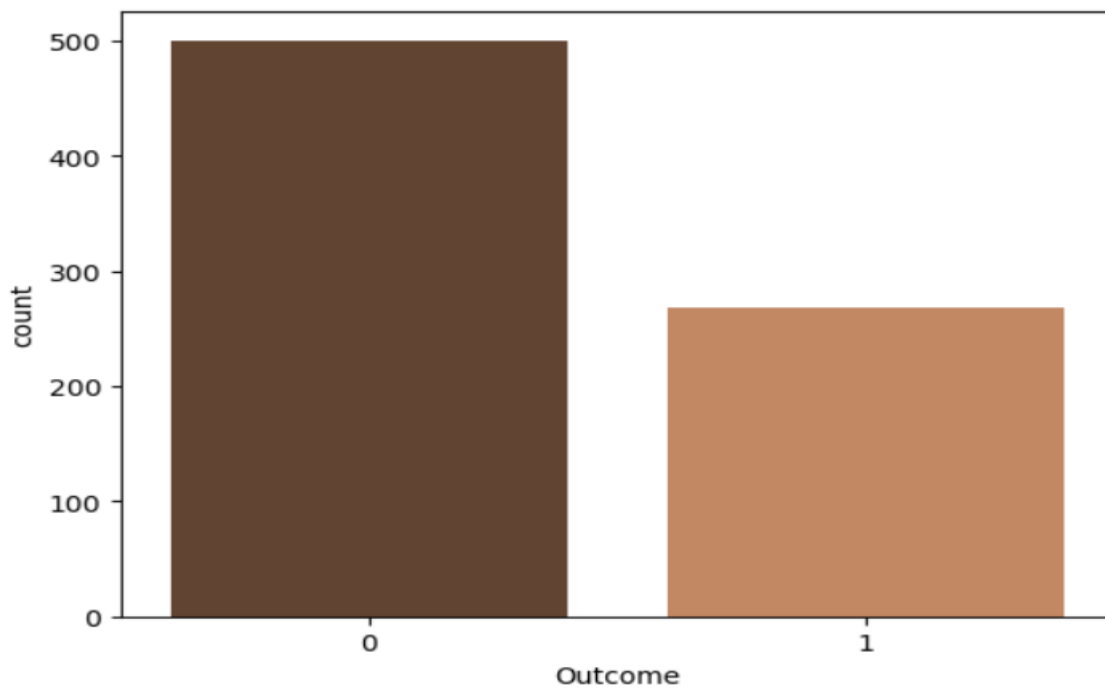
```
In [8]: #Generate distplot for age.
sns.distplot(df['Age'])
```

```
Out[8]: <Axes: xlabel='Age', ylabel='Density'>
```



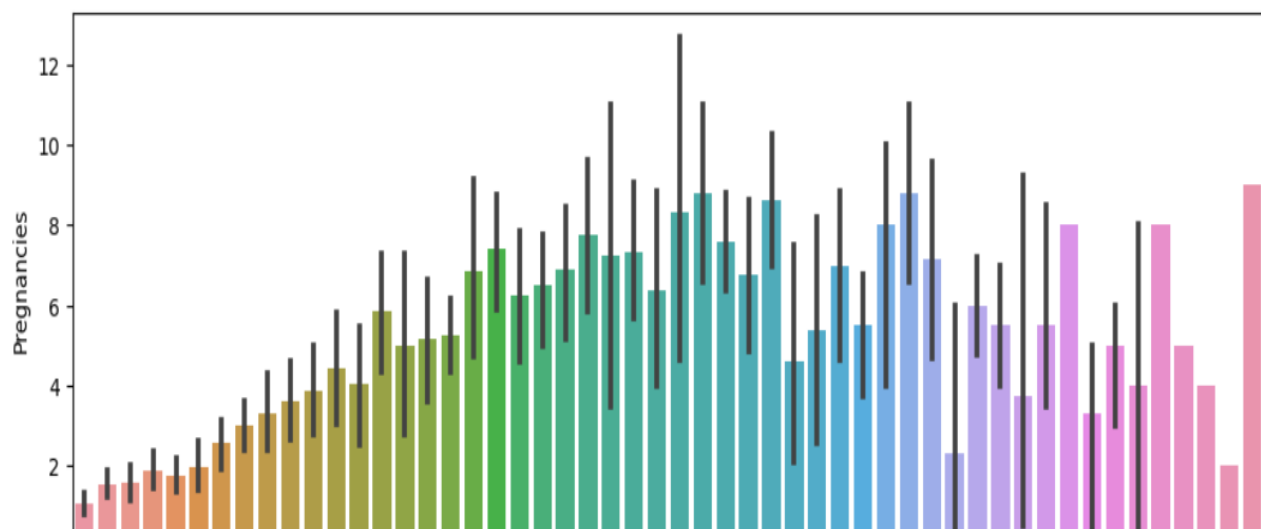
```
In [10]: #Generate countplot for outcome variable in diabetes dataset.  
sns.countplot(x=df['Outcome'],palette='copper')
```

```
Out[10]: <Axes: xlabel='Outcome', ylabel='count'>
```



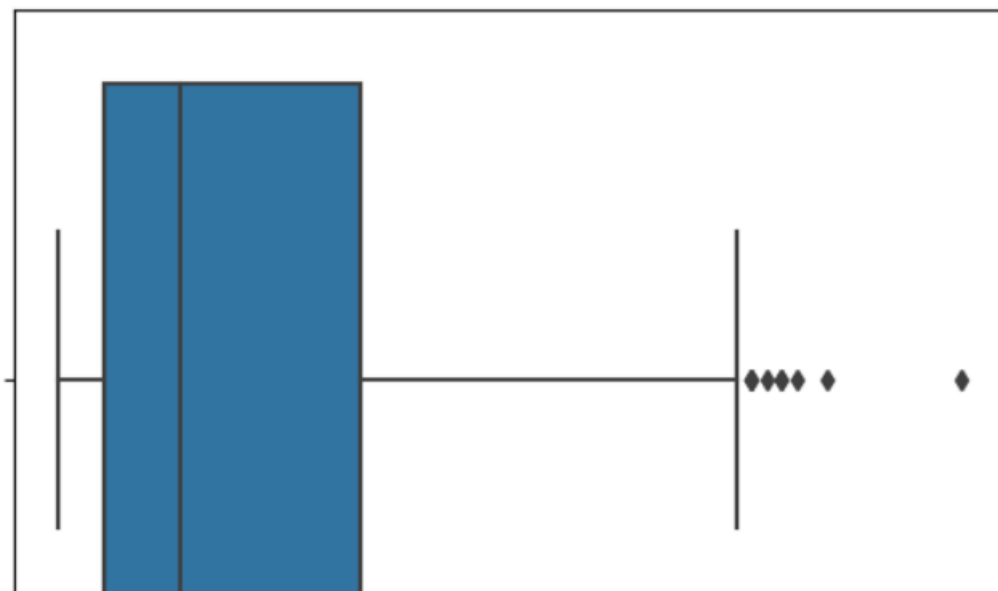
```
In [13]: #Generate barplot for age vs pregnancy in diabetes dataset.  
import matplotlib.pyplot as plt  
plt.figure(figsize=(12,4))  
  
sns.barplot(x='Age',y='Pregnancies',data=df)
```

```
Out[13]: <Axes: xlabel='Age', ylabel='Pregnancies'>
```



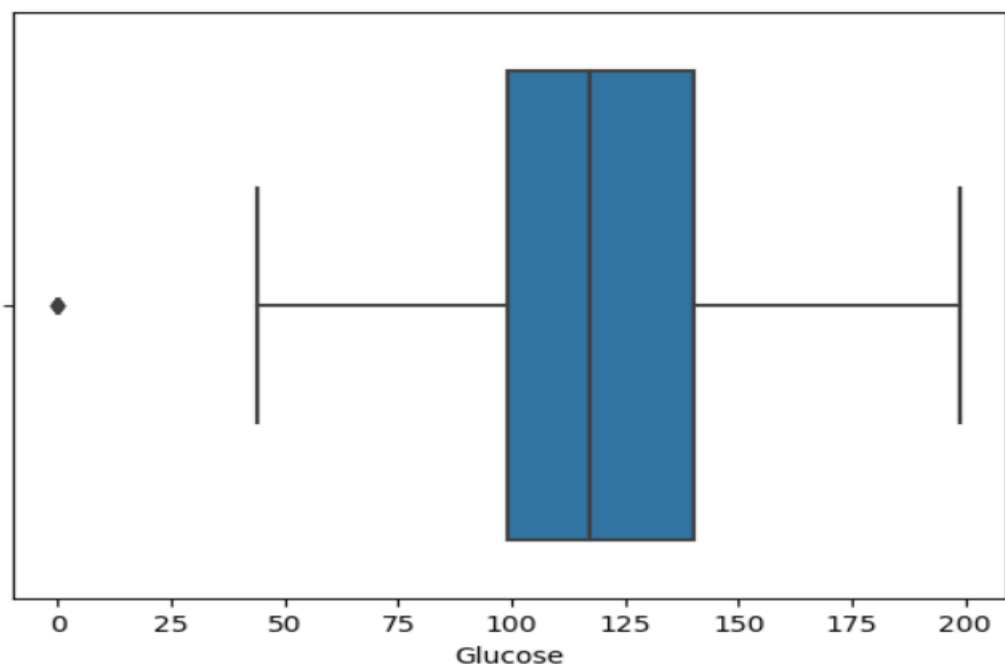
```
In [14]: # Generate box plot for age and glucose.  
sns.boxplot(x='Age',data=df)
```

```
Out[14]: <Axes: xlabel='Age'>
```



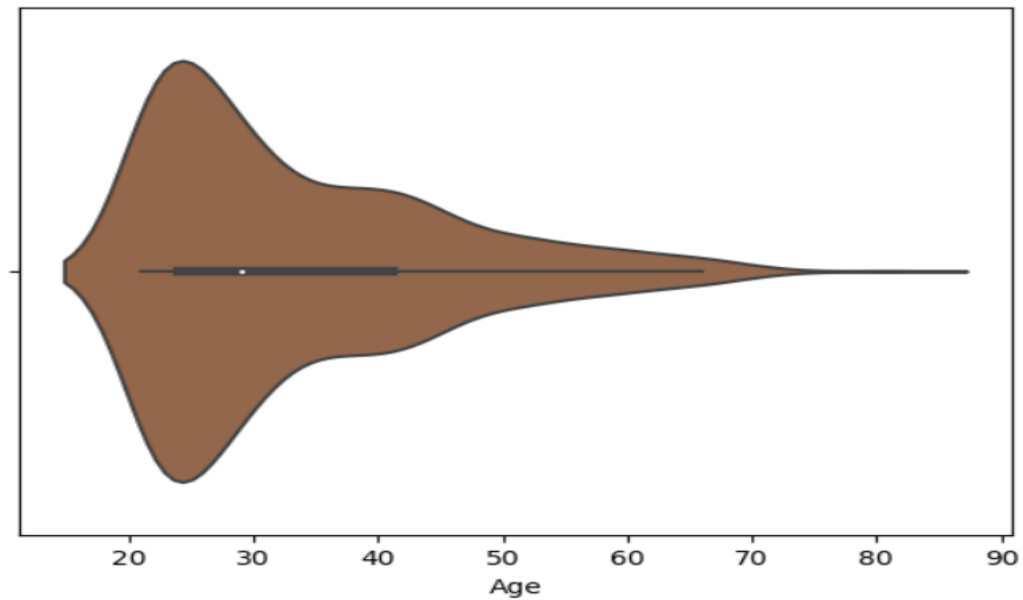
```
In [15]: sns.boxplot(x='Glucose',data=df)
```

```
Out[15]: <Axes: xlabel='Glucose'>
```



```
In [16]: #Generate violin plot for age and glucose.  
sns.violinplot(x=df['Age'],palette='copper')
```

Out[16]: <Axes: xlabel='Age'>



```
In [17]: sns.violinplot(x=df['Glucose'],palette='copper')
```

Out[17]: <Axes: xlabel='Glucose'>

