```python
import plotly.express as px
import seaborn as sns
```
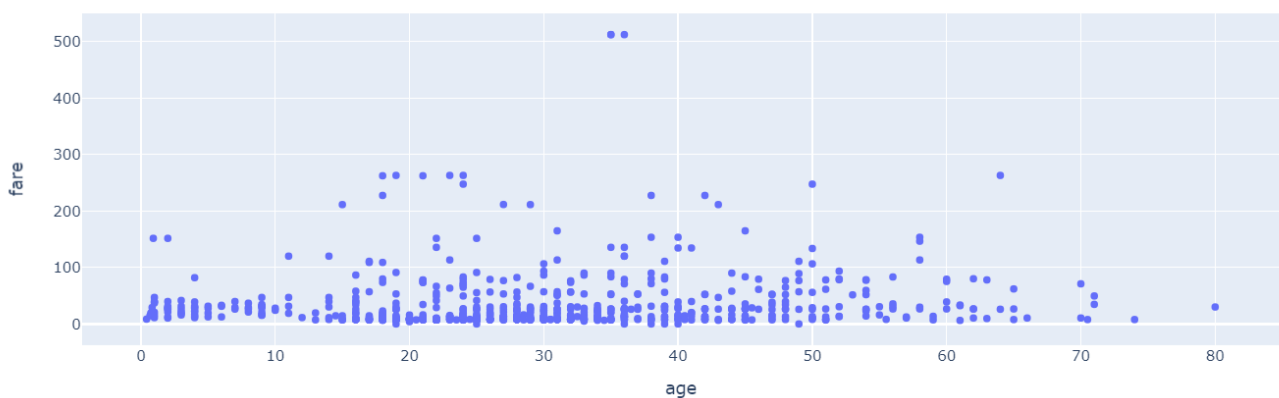
Q1. Load the "titanic" dataset using the load_dataset function of seaborn. Use Plotly express to plot a scatter plot for age and fare columns in the titanic dataset.

```python
fig=px.scatter(titanic,x='age',y='fare',title='titanic scatter plot Q1')
fig.show()
```
[30]

titanic scatter plot Q1

+ Code + Markdown | ▷ Run All ☰ Clear All Outputs ↺ Restart | 🔲 Variables ☰ Outline ⋯   🖳 Pyth

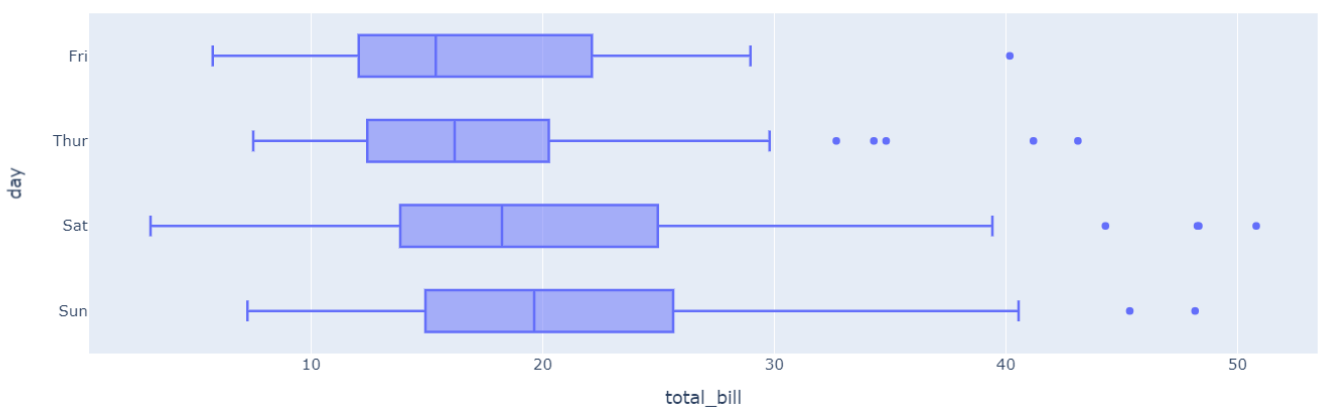Q2. Using the tips dataset in the Plotly library, plot a box plot using Plotly express.
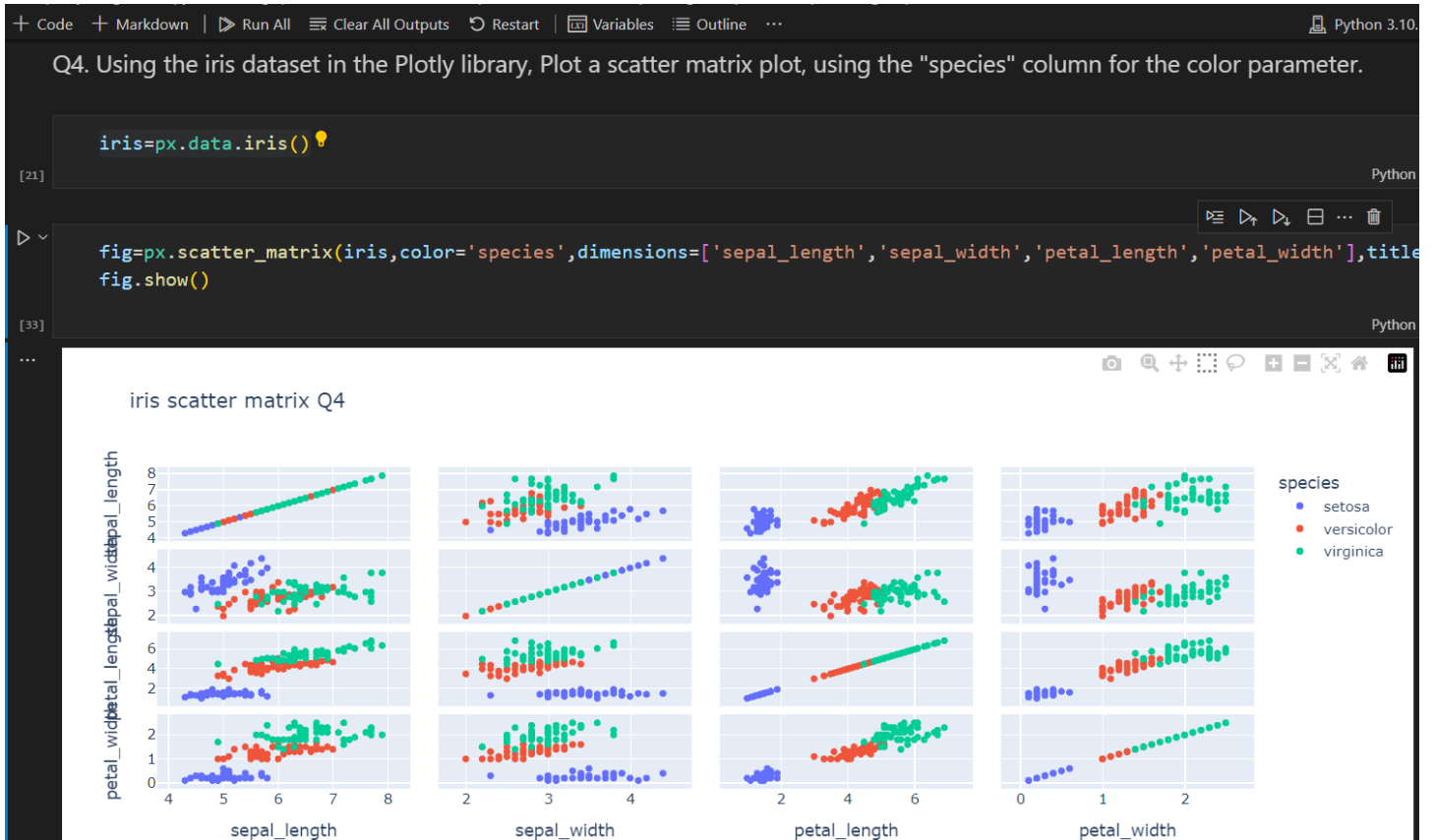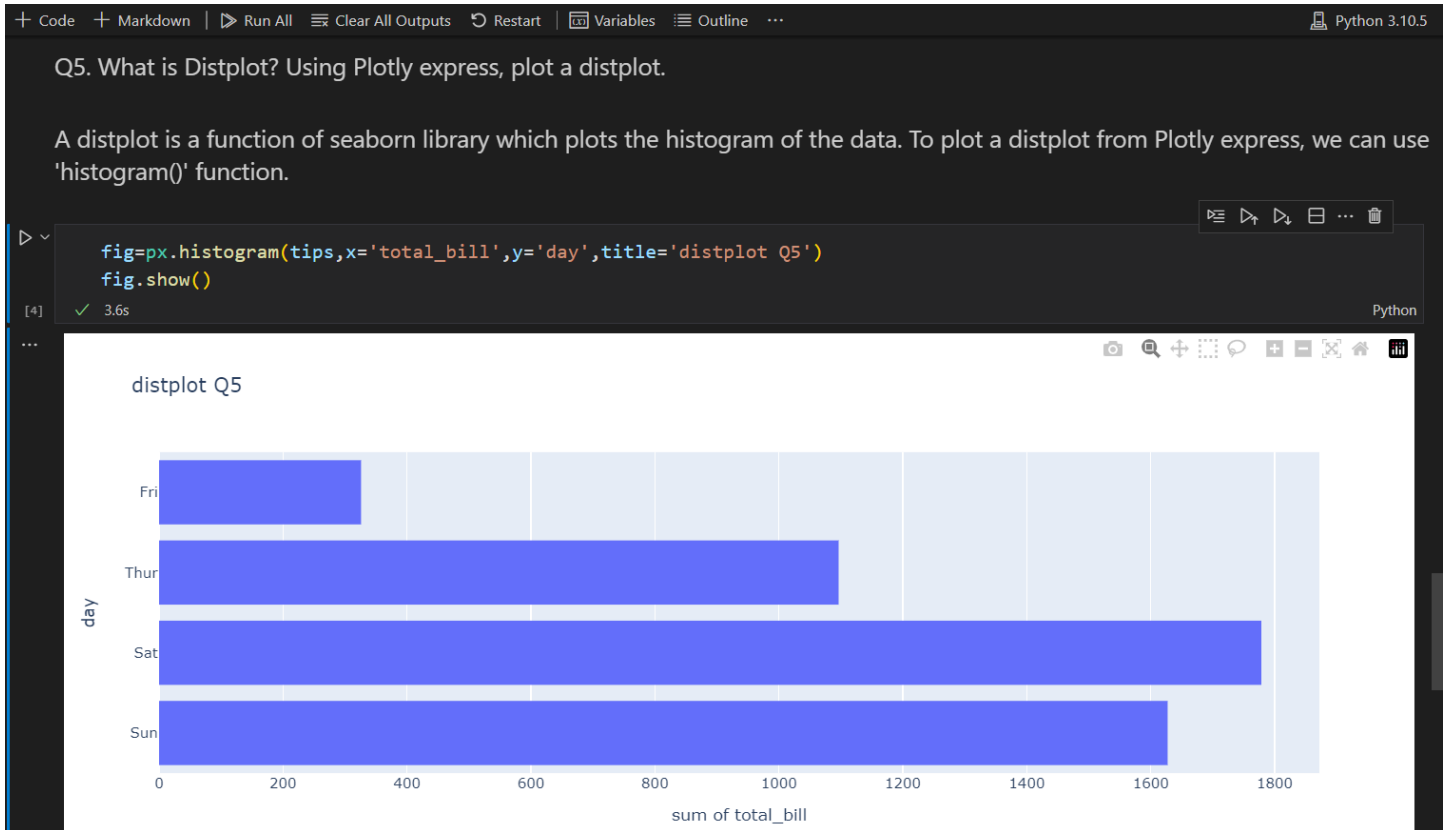
```python
tips=px.data.tips()
```
[24]

```python
fig=px.box(tips,x='total_bill',y='day',title='tips box plot Q2')
fig.show()
```
[31]

tips box plot Q2

Q3. Using the tips dataset in the Plotly library, Plot a histogram for x= "sex" and y="total_bill" column in the tips dataset. Also, use the "smoker" column with the pattern_shape parameter and the "day" column with the color parameter.

```python
fig=px.histogram(tips,x='sex',y='total_bill',pattern_shape='smoker',color='day',title='tips histogram Q3')
fig.show()
```

[32]   Python

Q4. Using the iris dataset in the Plotly library, Plot a scatter matrix plot, using the "species" column for the color parameter.

```python
iris=px.data.iris()
```

[21]   Python

```python
fig=px.scatter_matrix(iris,color='species',dimensions=['sepal_length','sepal_width','petal_length','petal_width'],title
fig.show()
```

[33]   Python

Q5. What is Distplot? Using Plotly express, plot a distplot.

A distplot is a function of seaborn library which plots the histogram of the data. To plot a distplot from Plotly express, we can use 'histogram()' function.

```python
fig=px.histogram(tips,x='total_bill',y='day',title='distplot Q5')
fig.show()
```

[4] ✓ 3.6s   Python

distplot Q5

I submitted this assignment as a PDF because Plotly was not functioning in Jupyter Lab. Therefore I completed all the assignment questions in VS Code by creating an .ipynb file. However I encountered issues when attempting to upload the file on GitHub due to its graphs. So I took screenshots of each question and answer from VS Code