assignment-5-1

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DIVISION : E4

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

[2]:
```
data=pd.read_csv('/content/data.csv')
df=pd.DataFrame(data)
df.head(10)
```

[2]:

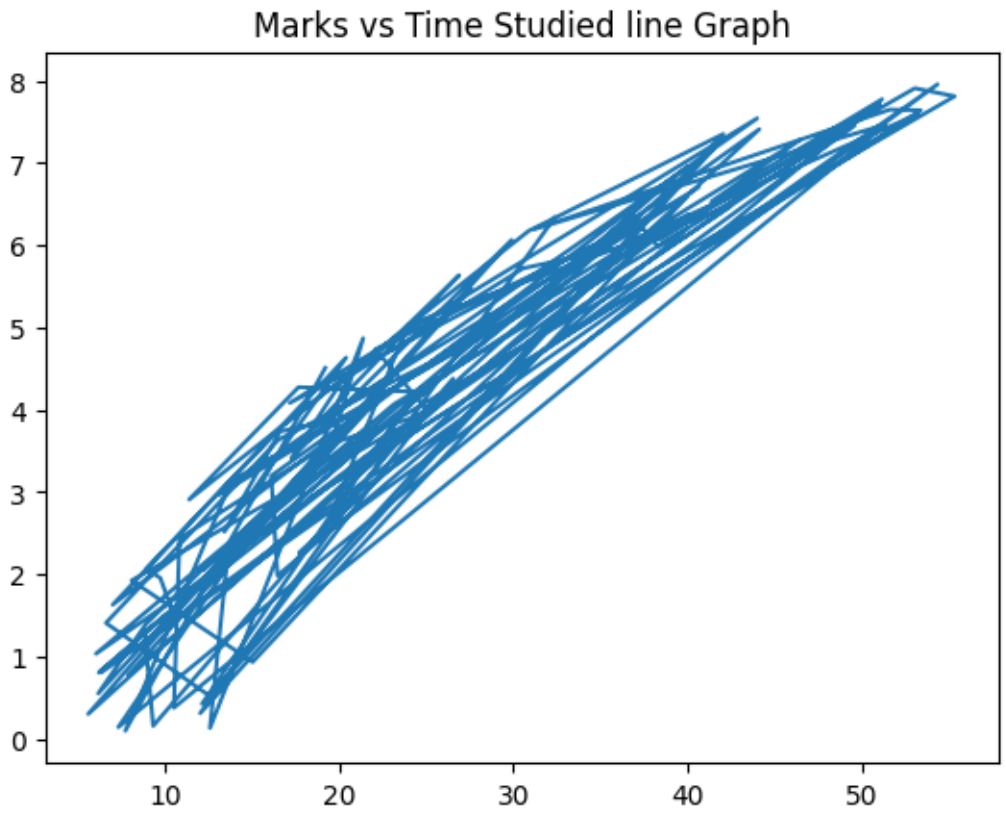
	number_courses	time_study	Marks
0	3	4.508	19.202
1	4	0.096	7.734
2	4	3.133	13.811
3	6	7.909	53.018
4	8	7.811	55.299
5	6	3.211	17.822
6	3	6.063	29.889
7	5	3.413	17.264
8	4	4.410	20.348
9	3	6.173	30.862

[3]:
```
number_courses = df['number_courses'].tolist()
```

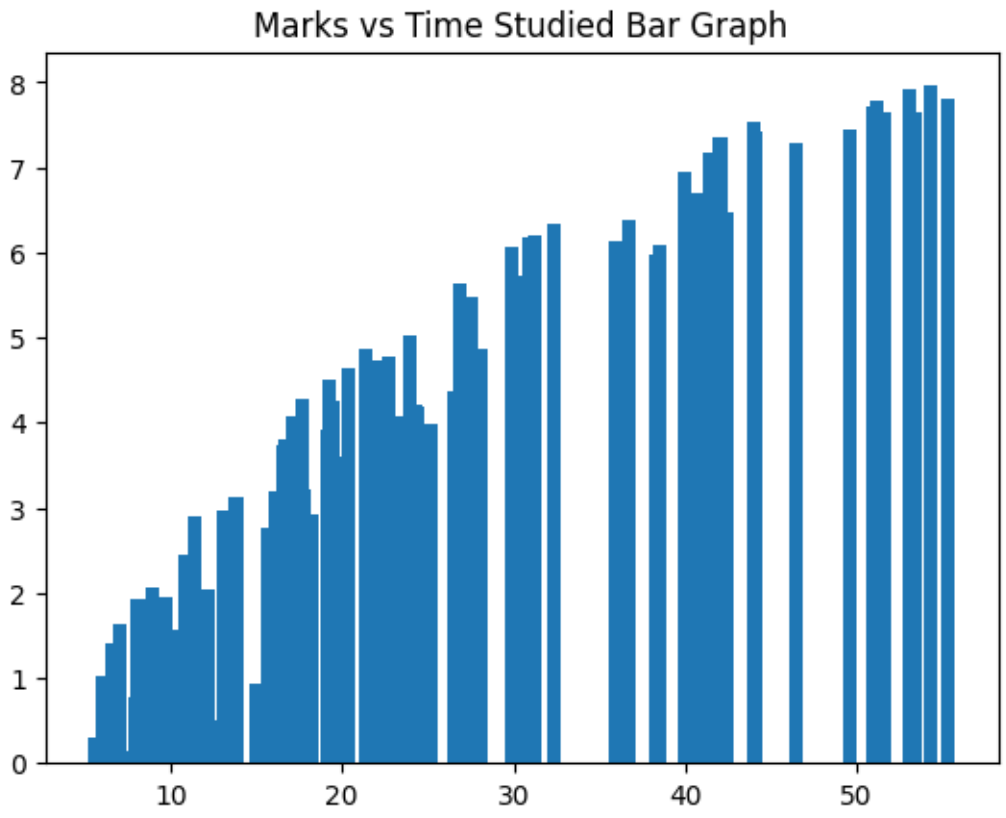
[4]:
```
Marks=df['Marks'].tolist()
```

[5]:
```
time_study=df['time_study'].tolist()
```

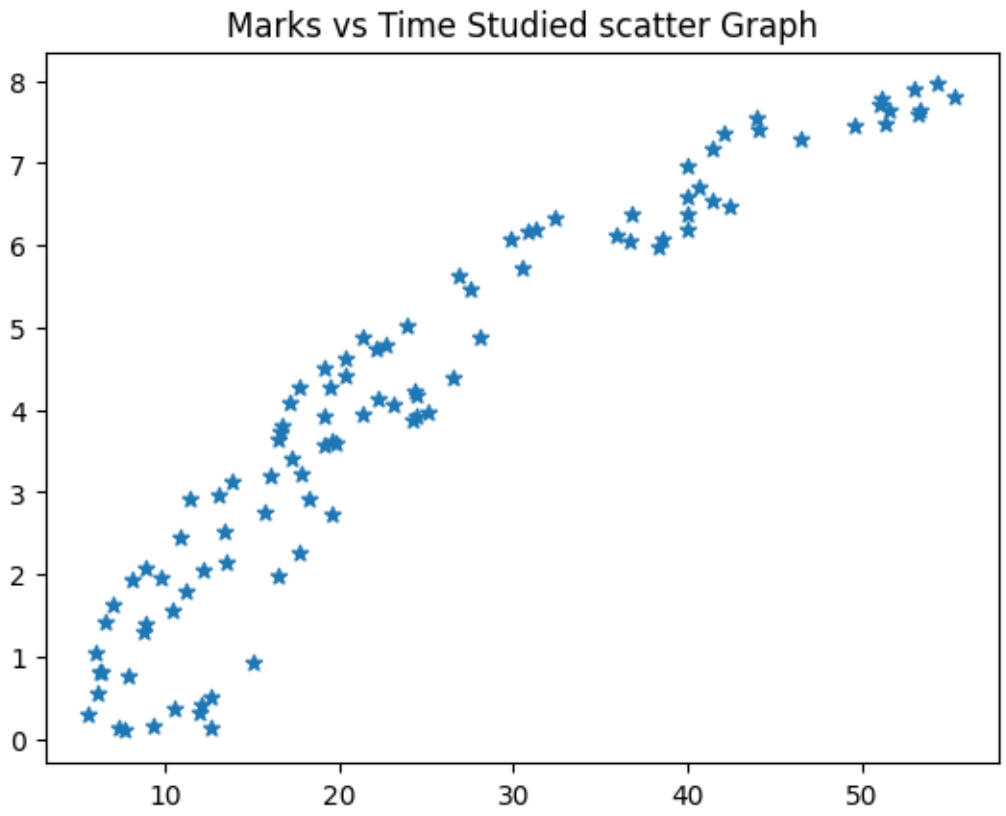
[6]:
```
x=Marks
y=time_study
plt.plot(x,y)
plt.title("Marks vs Time Studied line Graph")
plt.show()
```



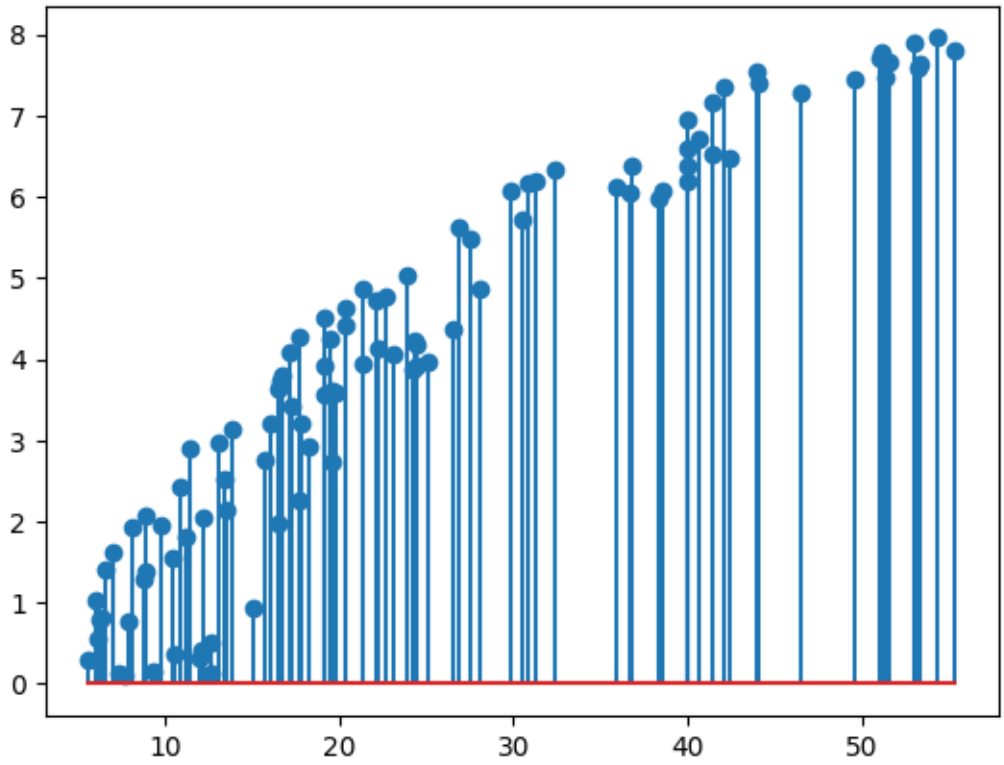
[7]:
```
plt.bar(x,y)
plt.title("Marks vs Time Studied Bar Graph")
plt.show()
```



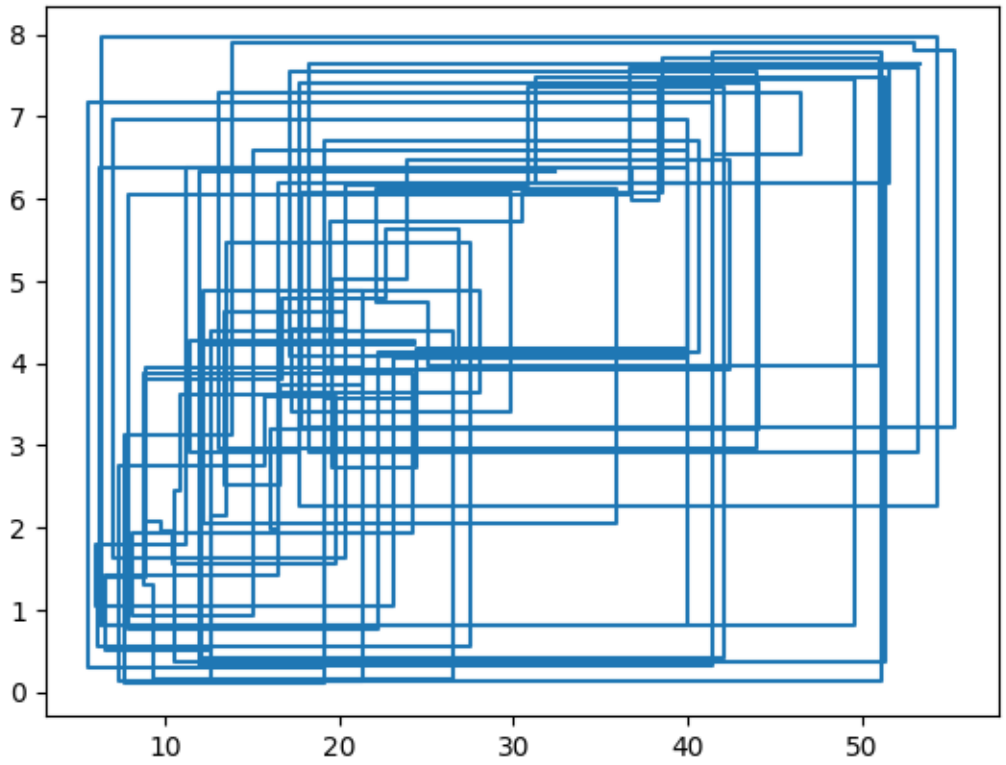
[8]:
```
plt.scatter(x,y,marker='*')
plt.title("Marks vs Time Studied scatter Graph")
plt.show()
```



[9]:
```
x=Marks
y=time_study
plt.stem(x,y)
plt.show()
```

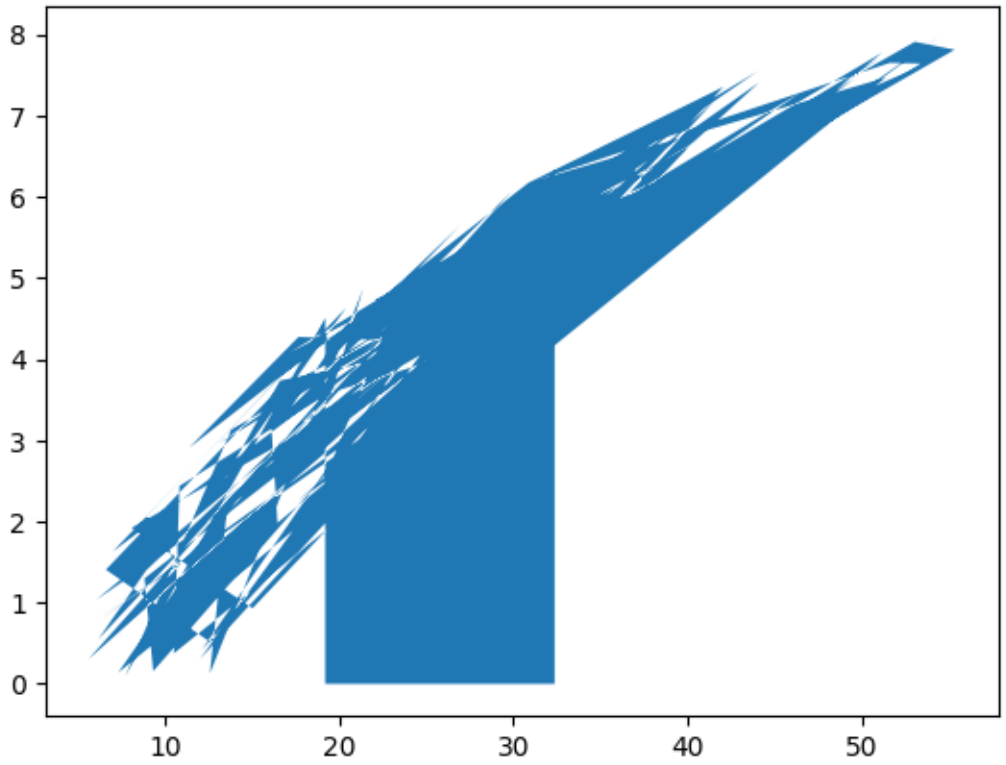


[10]:
```
plt.step(x,y)
plt.show()
```

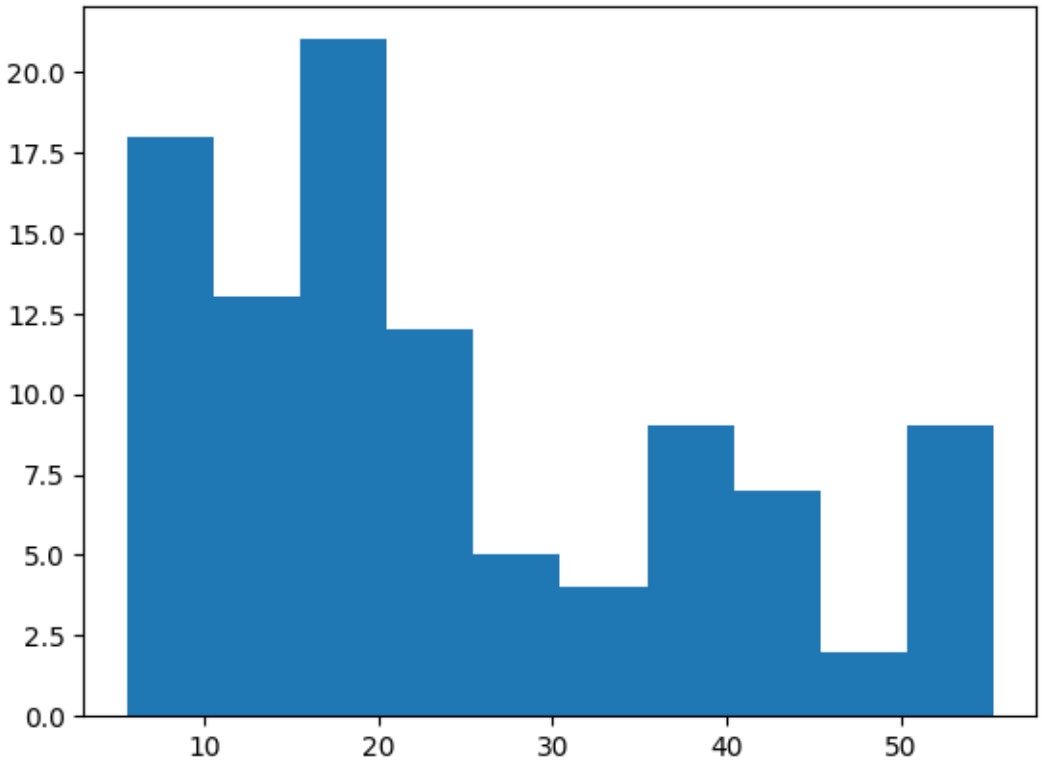


[11]:
```
plt.fill_between(x,y)
plt.show
```

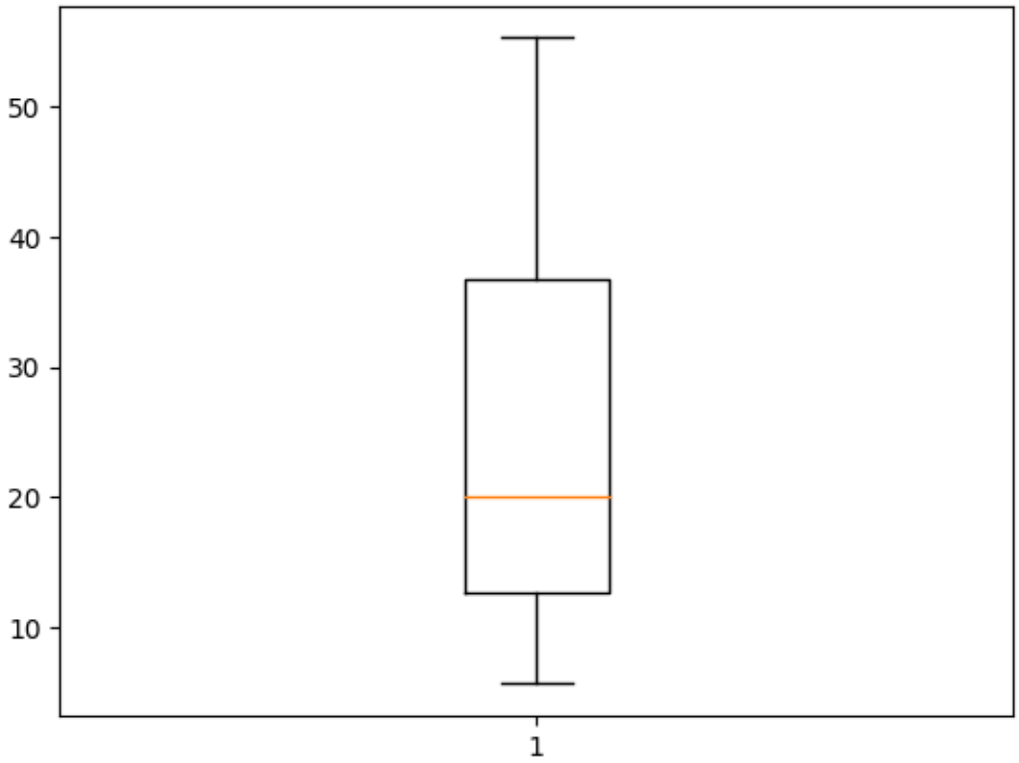
[11]:
```
<function matplotlib.pyplot.show(close=None, block=None)>
```



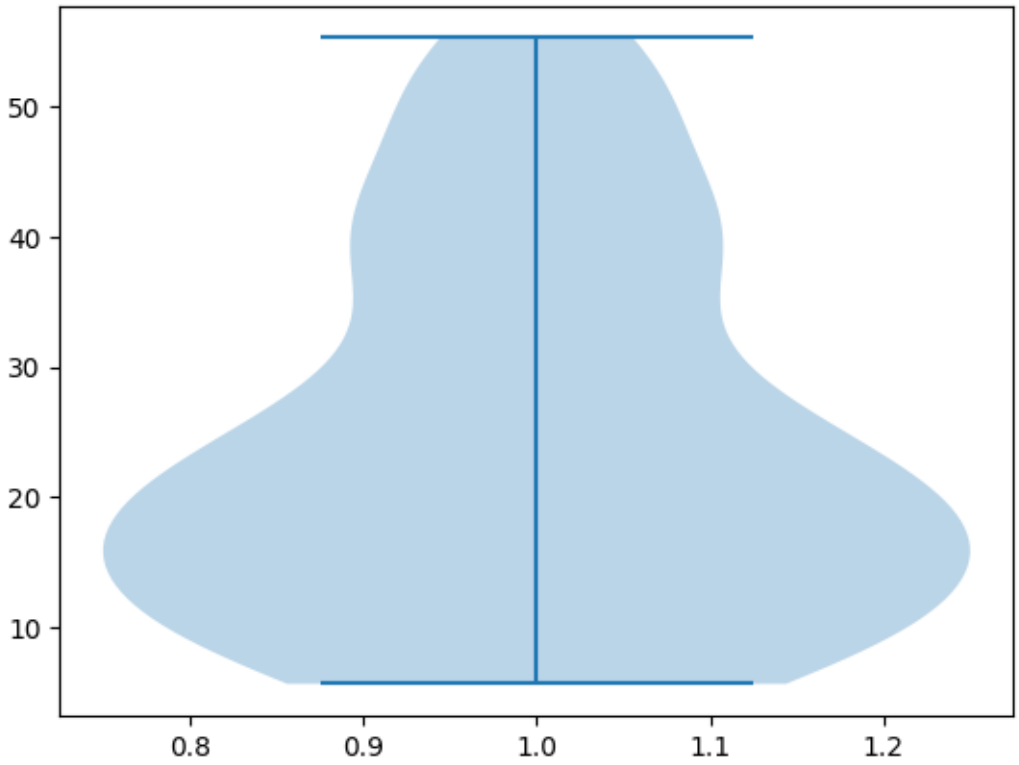
[12]:
```
plt.hist(x)
plt.show()
```



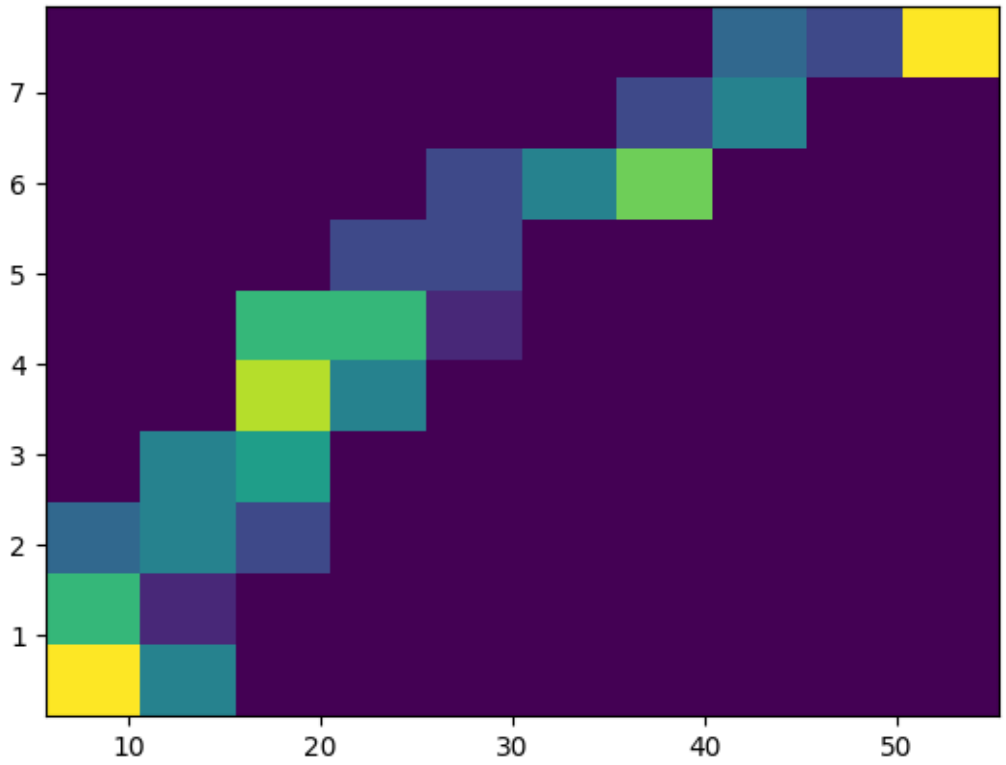
[13]:
```
plt.boxplot(x)
plt.show()
```



[14]:
```
plt.violinplot(x)
plt.show()
```



[15]:
```
plt.hist2d(x,y)
plt.show()
```



[16]:
```
plt.pie(x)
plt.show()
```