

Source code:--

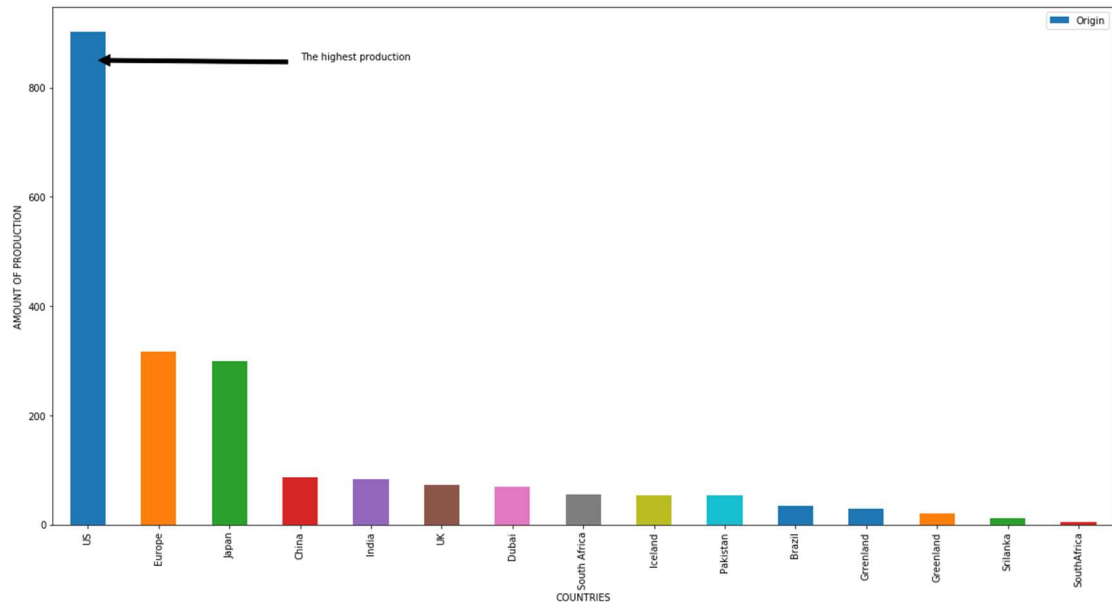
=>

```
import pandas as pd
import matplotlib.pyplot as plt
df = pd.read_csv('cars1111.csv')
plt.figure(figsize=(20,10))
plt.xlabel('COUNTRIES')
plt.ylabel('AMOUNT OF PRODUCTION')
plt.annotate('The highest production', xy=(0, 850), xytext=(3, 850),
             arrowprops=dict(facecolor='black', shrink=0.05),
             )
plt.annotate('The lowest production', xy=(400, 0), xytext=(400, 8),
             arrowprops=dict(facecolor='black', shrink=0.05),
             )
df_counts = df['Origin'].value_counts()
df_counts.plot(kind = 'bar')
plt.legend()
df_counts
```

OUTPUT:-

US	902
Europe	317
Japan	299
China	87
India	83
UK	73
Dubai	70
South Africa	56
Iceland	53
Pakistan	53
Brazil	34
Grrenland	30
Greenland	21
Srilanka	11
SouthAfrica	5

Name: Origin, dtype: int64



=>

```
import pandas as pd
```

```
import numpy as np
```

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

```
plt.figure(figsize=(20,10))
```

```
df = pd.read_csv('E:/cars1.csv')
```

```
plt.title('Production in specific year')
```

```
plt.xlabel('YEAR OF PRODUCTION')
```

```
plt.ylabel('AMOUNT OF PRODUCTION')
```

```
Year_count = df['Year'].value_counts()
```

```
Year_count.plot(kind = 'bar')
```

```
Year_count
```

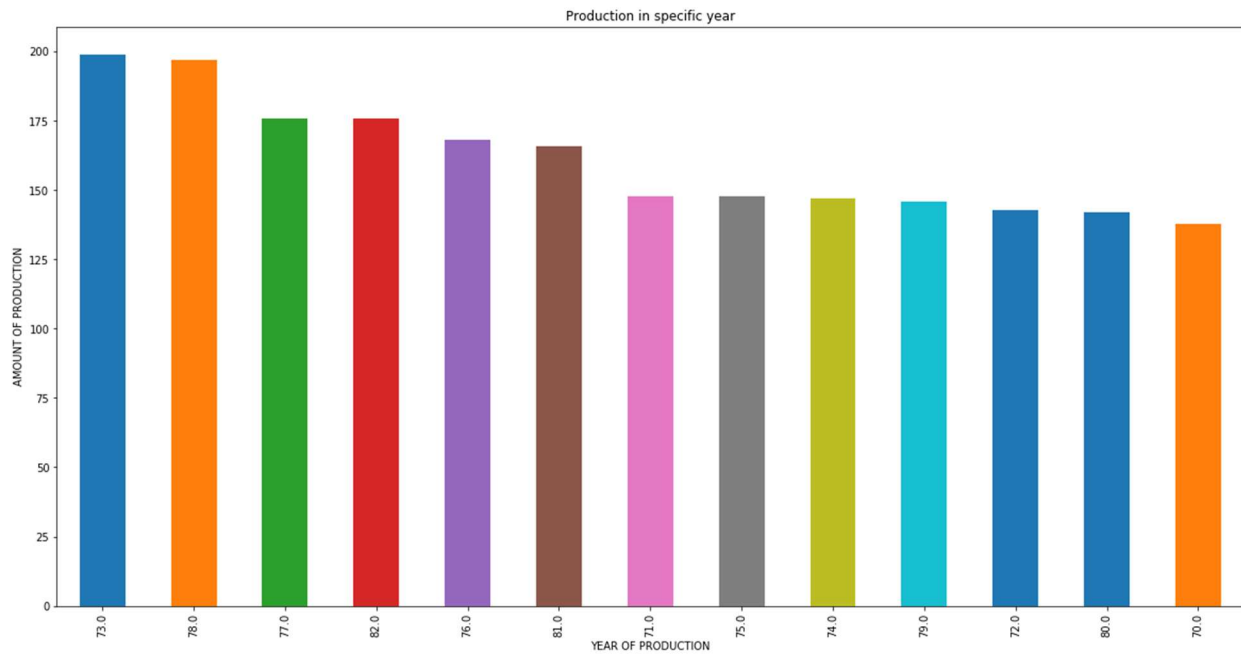
OUTPUT:-

```
73.0    199
78.0    197
77.0    176
82.0    176
76.0    168
81.0    166
71.0    148
75.0    148
```

```

74.0    147
79.0    146
72.0    143
80.0    142
70.0    138
Name: Year, dtype: int64

```



Pie analysis:-

```

import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

plt.figure(figsize=(20,10))

df = pd.read_csv('E:/cars1.csv')

plt.title('Production in specific year')
plt.xlabel('YEAR OF PRODUCTION')
plt.ylabel('AMOUNT OF PRODUCTION')

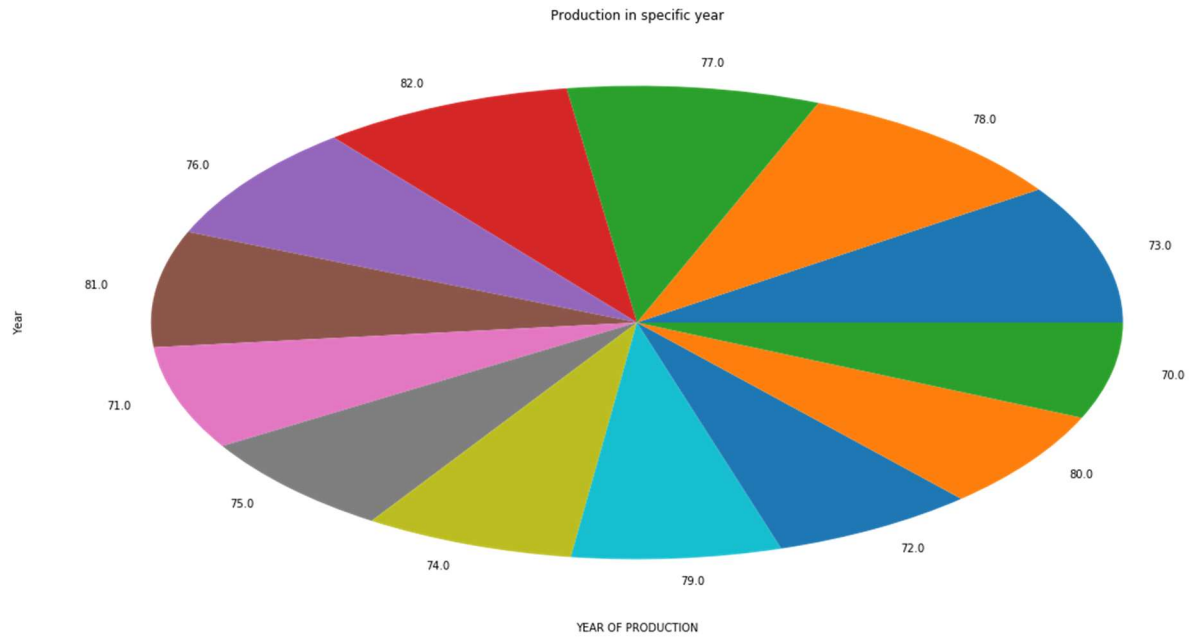
Year_count = df['Year'].value_counts()

Year_count.plot(kind = 'Pie')

Year_count

```

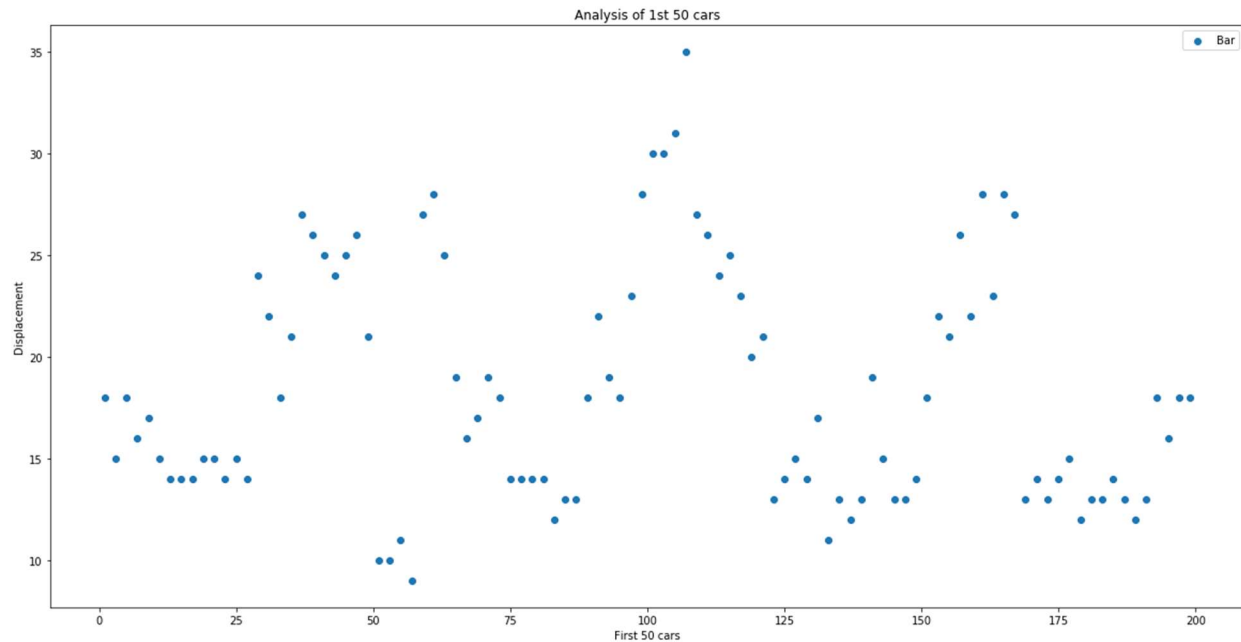
OUTPUT:-



=>

```
plt.figure(figsize=(20,10))
df1 = df[0:200]
y = df1['MPG']
x = list(range(200))
plt.scatter(x, y, label='Bar')
#plt.plot(x, x**2, label='quadratic')
#plt.plot(x, x**3, label='cubic')
plt.xlabel('First 50 cars')
plt.ylabel('Displacement')
plt.title("Analysis of 1st 50 cars")
plt.legend()
plt.show()
```

OUTPUT:-



=>

```
plt.figure(figsize=(20,10))

df1 = df[0:200]

y = df1['Acceleration']

x = list(range(200))

plt.scatter(x, y, label='Bar')

#plt.plot(x, x**2, label='quadratic')

#plt.plot(x, x**3, label='cubic')

plt.xlabel('First 100 cars')

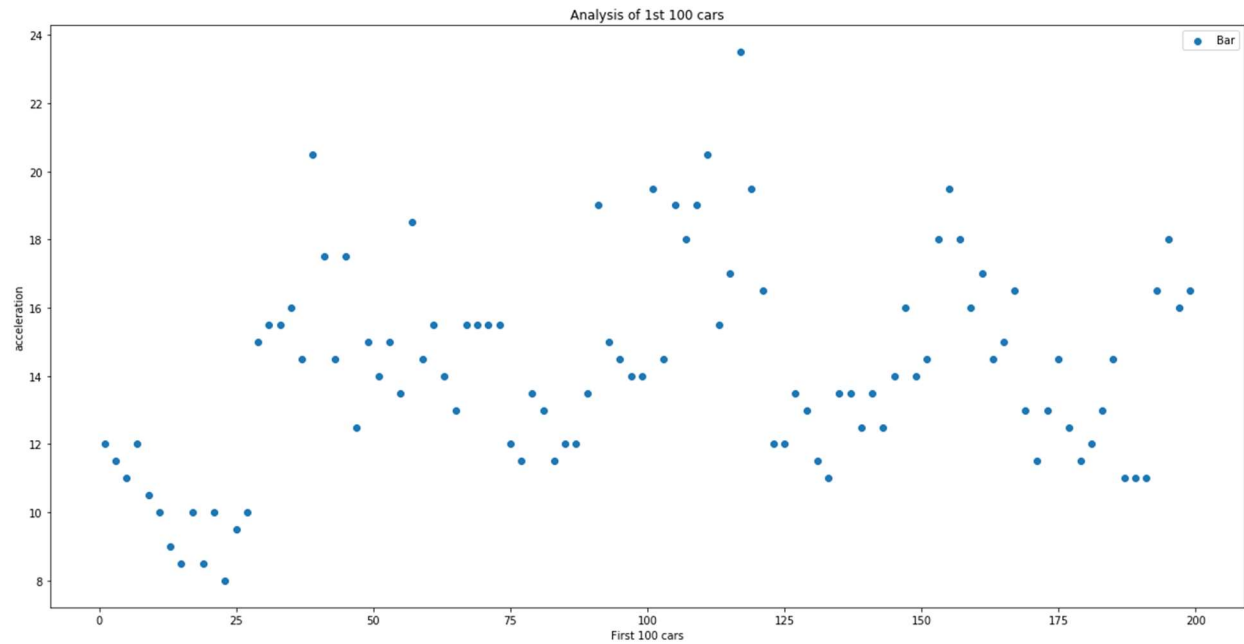
plt.ylabel('acceleration')

plt.title("Analysis of 1st 100 cars")

plt.legend()

plt.show()
```

OUTPUT:-



=>

```
x = df['Year']
```

```
y = df['Acceleration']
```

```
plt.xlabel('Year')
```

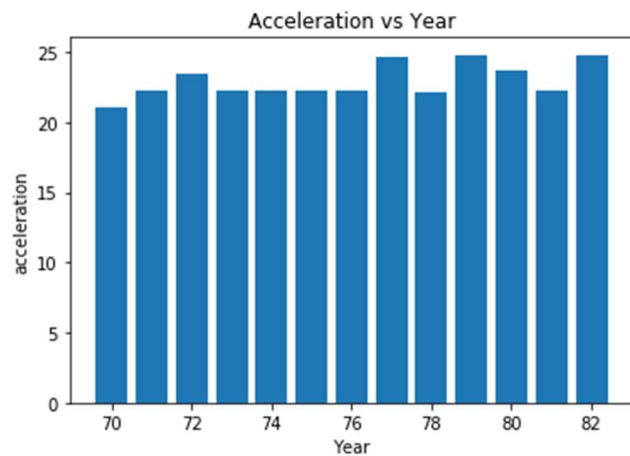
```
plt.ylabel('acceleration')
```

```
plt.title("Acceleration vs Year")
```

```
plt.bar(x,y)
```

```
plt.show()
```

OUTPUT:-



=>

```
x = df['Year']
```

```
y = df['Horsepower']
```

```
plt.xlabel('Year')
```

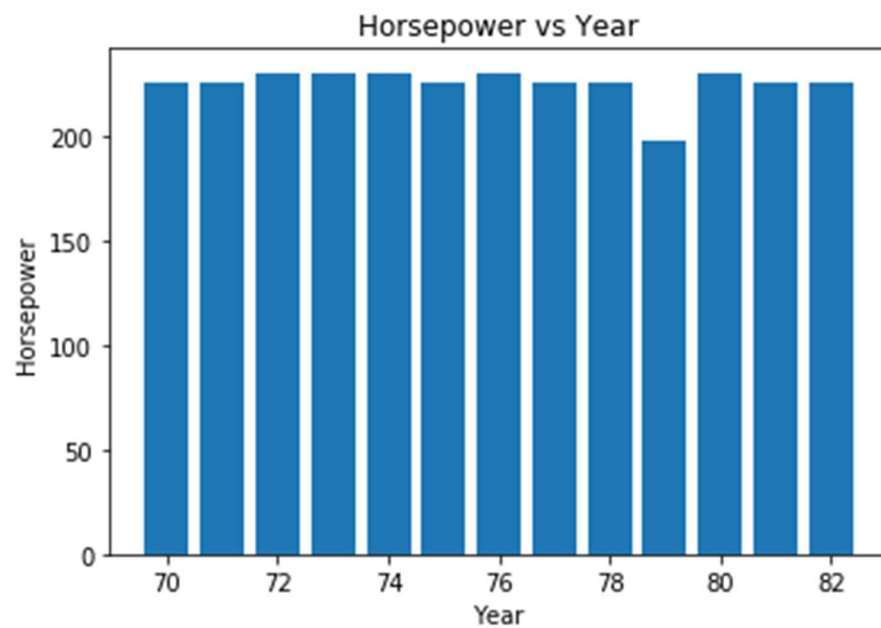
```
plt.ylabel('Horsepower')
```

```
plt.title("Horsepower vs Year")
```

```
plt.bar(x,y)
```

```
plt.show()
```

OUTPUT:-



=>

```
x = df['Year']
```

```
y = df['MPG']
```

```
plt.xlabel('Year')
```

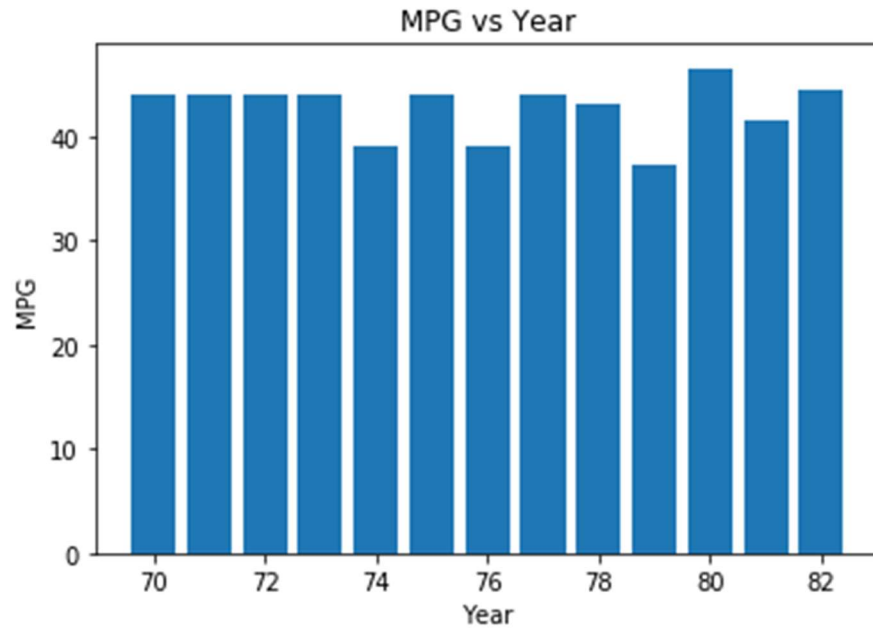
```
plt.ylabel('MPG')
```

```
plt.title("MPG vs Year")
```

```
plt.bar(x,y)
```

```
plt.show()
```

OUTPUT:-



=>

```
plt.figure(figsize=(20,10))
```

```
x = df['Weight']
```

```
y = df['Acceleration']
```

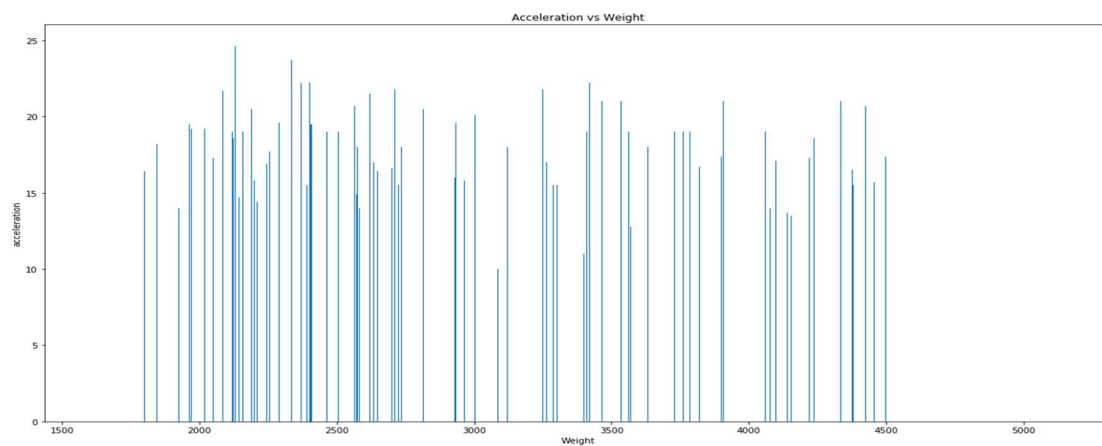
```
plt.xlabel('Weight')
```

```
plt.ylabel('acceleration')
```

```
plt.title("Acceleration vs Weight")
```

```
plt.bar(x,y)
```

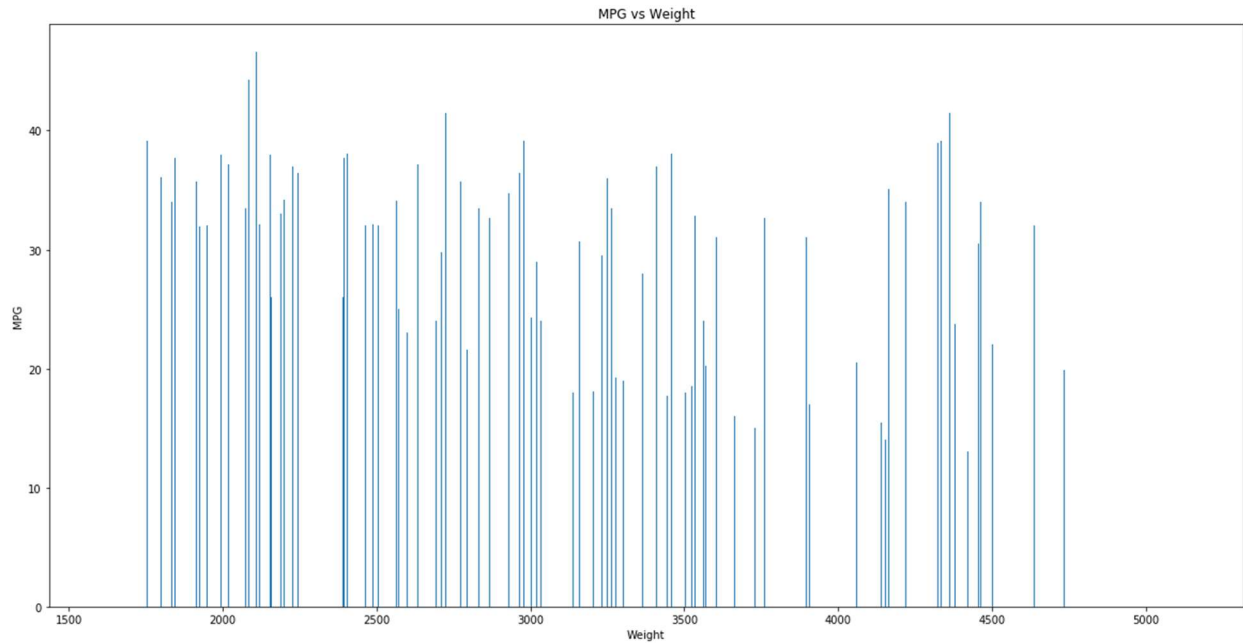
```
plt.show()
```



=>

```
plt.figure(figsize=(20,10))  
x = df['Weight']  
y = df['MPG']  
plt.xlabel('Weight')  
plt.ylabel('MPG')  
plt.title("MPG vs Weight")  
plt.bar(x,y)  
plt.show()
```

OUTPUT:-



=>

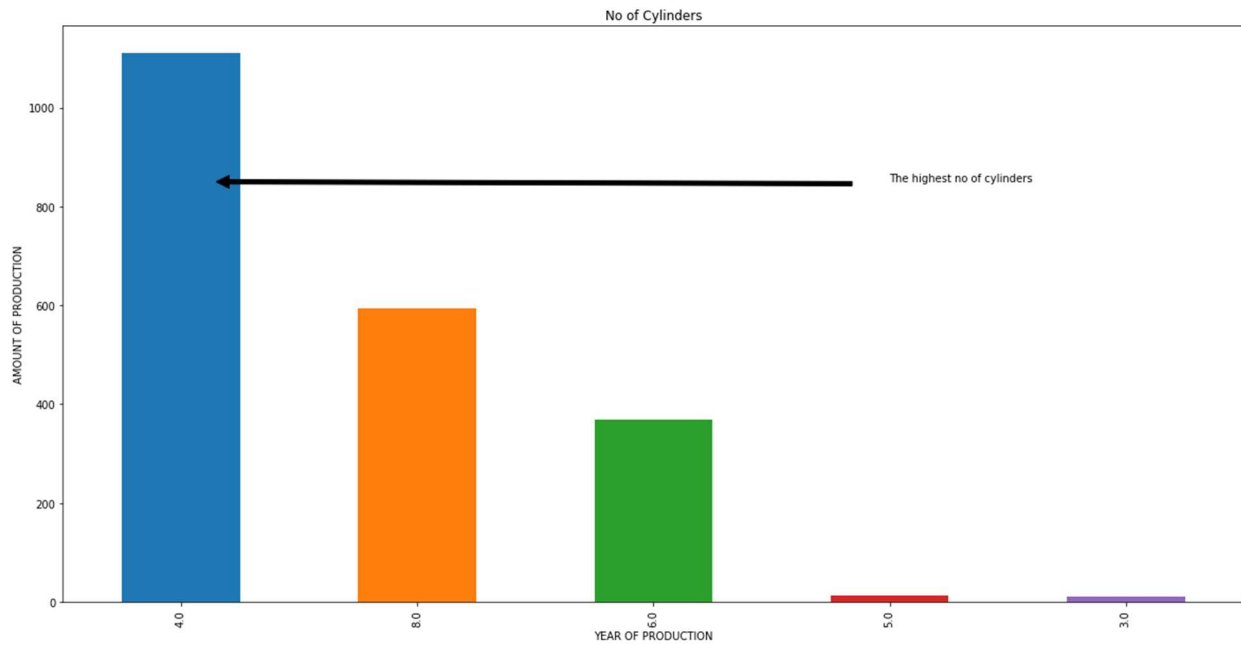
```
plt.figure(figsize=(20,10))  
df = pd.read_csv('E:/cars1.csv')  
plt.title('No of Cylinders')  
plt.xlabel('YEAR OF PRODUCTION')  
plt.ylabel('AMOUNT OF PRODUCTION')  
plt.annotate('The highest no of cylinders', xy=(0, 850), xytext=(3, 850),
```

```

        arrowprops=dict(facecolor='black', shrink=0.05),
    )
Year_count = df['Cylinders'].value_counts()
Year_count.plot(kind = 'bar')

```

OUTPUT:-



Pie analysis:-

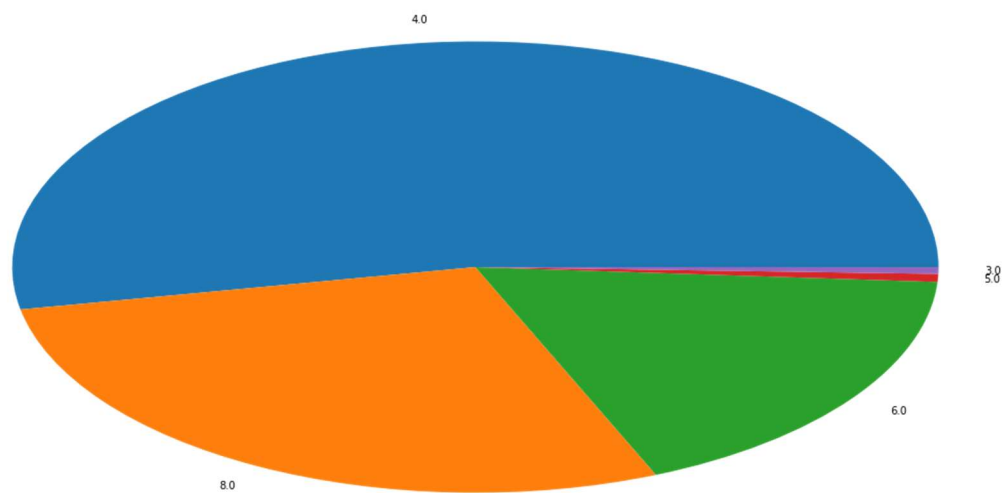
```

plt.figure(figsize=(20,10))
df = pd.read_csv('cars1111.csv')
plt.xlabel('YEAR OF PRODUCTION')
plt.ylabel('AMOUNT OF PRODUCTION')
Year_count = df['Cylinders'].value_counts()
Year_count.plot(kind = 'pie')

```

OUTPUT:-

Cylinders



YEAR OF PRODUCTION