```
# Importing the Necessary Libraries

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


# 1.Load a dataset in your IDE

dataset = pd.read_csv("/content/googleplaystore_v2.csv")


# 2.Observe the statistics of all the features

dataset.describe()
```

| | Rating | Size |
|---|---|---|
| **count** | 9367.000000 | 10841.000000 |
| **mean** | 4.193338 | 21516.529524 |
| **std** | 0.537431 | 20746.537567 |
| **min** | 1.000000 | 8.500000 |
| **25%** | 4.000000 | 5900.000000 |
| **50%** | 4.300000 | 18000.000000 |
| **75%** | 4.500000 | 26000.000000 |
| **max** | 19.000000 | 100000.000000 |

```
# 3.Obtain the shape of the dataset

dataset.shape
```

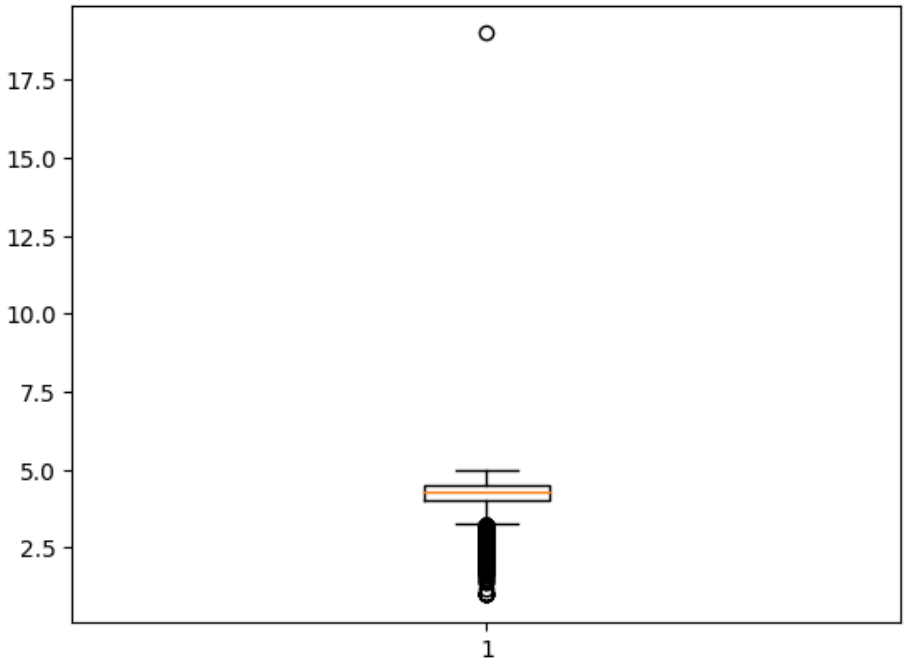
```
(10841, 13)
```

```
# 4.Separate all the features

dataset.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 10841 entries, 0 to 10840
Data columns (total 13 columns):
 #   Column          Non-Null Count  Dtype  
---  ------          --------------  -----  
 0   App             10841 non-null  object 
 1   Category        10841 non-null  object 
 2   Rating          9367 non-null   float64
 3   Reviews         10841 non-null  object 
 4   Size            10841 non-null  float64
 5   Installs        10841 non-null  object 
 6   Type            10840 non-null  object 
 7   Price           10841 non-null  object 
 8   Content Rating  10840 non-null  object 
 9   Genres          10841 non-null  object 
 10  Last Updated    10841 non-null  object 
 11  Current Ver     10833 non-null  object 
 12  Android Ver     10838 non-null  object 
dtypes: float64(2), object(11)
memory usage: 1.1+ MB
```

```
# 5.Fill the missing values, if any, using the statistically relevant value

# Remove the Observation Having the NULL Values

dataset = dataset.drop(dataset[dataset['Rating'].isnull()].index)

# Replacing the NULL Values with DUMMY Values

dataset['Android Ver'].fillna(value = '4.1 and up' , inplace = True)
dataset['Current Ver'].fillna(value = 'Varies with device' , inplace = True)
dataset['Content Rating'].fillna(value = 'Everyone' , inplace = True)
dataset['Type'].fillna(value = 'Free' , inplace = True)


# 6.Observe the Box-Plot of each feature

# For Rating

plt.boxplot(dataset['Rating'])
```

```
{'whiskers': [<matplotlib.lines.Line2D at 0x7c07feb19330>,
  <matplotlib.lines.Line2D at 0x7c07feb195d0>],
 'caps': [<matplotlib.lines.Line2D at 0x7c07feb19870>,
  <matplotlib.lines.Line2D at 0x7c07feb19b10>],
 'boxes': [<matplotlib.lines.Line2D at 0x7c07feb19090>],
 'medians': [<matplotlib.lines.Line2D at 0x7c07feb19db0>],
 'fliers': [<matplotlib.lines.Line2D at 0x7c07feb1a050>],
 'means': []}
```




```
# For Size

plt.boxplot(dataset['Size'])
```

```
{'whiskers': [<matplotlib.lines.Line2D at 0x7c07febbcbb0>,
  <matplotlib.lines.Line2D at 0x7c07febbce50>],
 'caps': [<matplotlib.lines.Line2D at 0x7c07febbd0f0>,
  <matplotlib.lines.Line2D at 0x7c07febbd390>],
 'boxes': [<matplotlib.lines.Line2D at 0x7c07febbc910>],
 'medians': [<matplotlib.lines.Line2D at 0x7c07febbd630>],
 'fliers': [<matplotlib.lines.Line2D at 0x7c07febbd8d0>],
 'means': []}
```