

```
import pandas as pd
```

```
import numpy as np
```

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

```
df = pd.read_csv("https://raw.githubusercontent.com/YBI-Foundation/Dataset/main/Admission%20Chance.csv")
```

```
df.head()
```

| | Serial No | GRE Score | TOEFL Score | University Rating | SOP | LOR | CGPA | Research | Chance of Admit |
|---|-----------|-----------|-------------|-------------------|-----|-----|------|----------|-----------------|
| 0 | 1 | 337 | 118 | 4 | 4.5 | 4.5 | 9.65 | 1 | 0.92 |
| 1 | 2 | 324 | 107 | 4 | 4.0 | 4.5 | 8.87 | 1 | 0.76 |
| 2 | 3 | 316 | 104 | 3 | 3.0 | 3.5 | 8.00 | 1 | 0.72 |
| 3 | 4 | 322 | 110 | 3 | 3.5 | 2.5 | 8.67 | 1 | 0.80 |
| 4 | 5 | 314 | 103 | 2 | 2.0 | 3.0 | 8.21 | 0 | 0.65 |

```
df.tail()
```

| | Serial No | GRE Score | TOEFL Score | University Rating | SOP | LOR | CGPA | Research | Chance of Admit |
|-----|-----------|-----------|-------------|-------------------|-----|-----|------|----------|-----------------|
| 395 | 396 | 324 | 110 | 3 | 3.5 | 3.5 | 9.04 | 1 | 0.82 |
| 396 | 397 | 325 | 107 | 3 | 3.0 | 3.5 | 9.11 | 1 | 0.84 |
| 397 | 398 | 330 | 116 | 4 | 5.0 | 4.5 | 9.45 | 1 | 0.91 |
| 398 | 399 | 312 | 103 | 3 | 3.5 | 4.0 | 8.78 | 0 | 0.67 |
| 399 | 400 | 333 | 117 | 4 | 5.0 | 4.0 | 9.66 | 1 | 0.95 |

```
df.dtypes
```

```

Serial No      int64
GRE Score      int64
TOEFL Score     int64
University Rating  int64
SOP            float64
LOR            float64
CGPA           float64
Research       int64
Chance of Admit float64
dtype: object

```

```
df.isnull().sum()
```

```

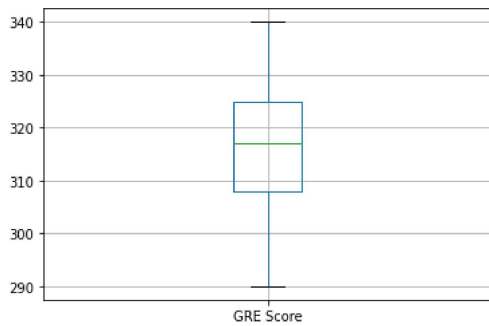
Serial No      0
GRE Score      0
TOEFL Score     0
University Rating 0
SOP            0
LOR            0
CGPA           0
Research       0
Chance of Admit 0
dtype: int64

```

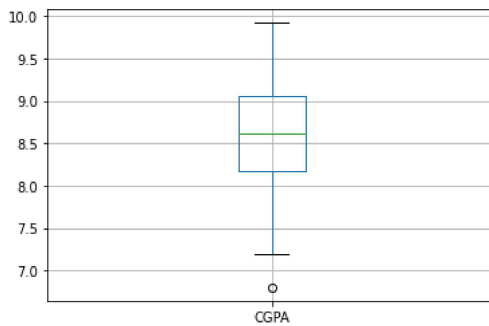
```
boxplot = df.boxplot(column=['Serial No'])
```



```
boxplot = df.boxplot(column=['GRE Score'])
```



```
boxplot = df.boxplot(column=['CGPA'])
```



```
Q1 = df['CGPA'].quantile(0.25)
```

```
Q3 = df['CGPA'].quantile(0.75)
```

```
IQR = Q3-Q1
```

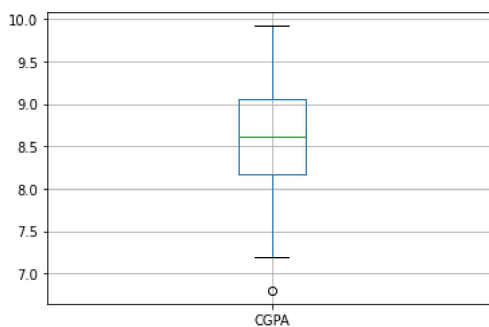
```
Lower_Limit = Q1-1.5*IQR
```

```
Upper_Limit = Q3+1.5*IQR
```

```
print("Q1:", Q1, "\nQ3:", Q3, "\nIQR:", IQR, "\nLower_Limit:", Lower_Limit, "\nUpper_Limit:", Upper_Limit)
```

```
Q1: 8.17
Q3: 9.0625
IQR: 0.8925000000000001
Lower_Limit: 6.83125
Upper_Limit: 10.401250000000001
```

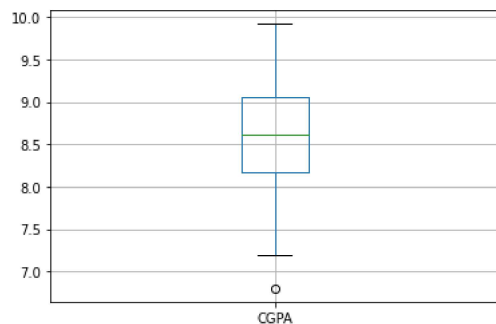
```
boxplot = df.boxplot(column=['CGPA'])
```



```
df[(df['CGPA']<Lower_Limit)|(df['CGPA']>Upper_Limit)]
```

| | Serial No | GRE Score | TOEFL Score | University Rating | SOP | LOR | CGPA | Research | Chance of Admit |
|----|-----------|-----------|-------------|-------------------|-----|-----|------|----------|-----------------|
| 58 | 59 | 300 | 99 | 1 | 3.0 | 2.0 | 6.8 | 1 | 0.36 |

```
boxplot = df.boxplot(column=['CGPA'])
```



```
df = df[(df['CGPA']>Lower_Limit)&(df['CGPA']<Upper_Limit)]
df[60:70]
```

| | Serial No | GRE Score | TOEFL Score | University | Rating | SOP | LOR | CGPA | Research | Chance of | Admit |
|----|-----------|-----------|-------------|------------|--------|-----|-----|------|----------|-----------|-------|
| 61 | 62 | 307 | 101 | | 3 | 4.0 | 3.0 | 8.20 | 0 | | 0.47 |
| 62 | 63 | 304 | 105 | | 2 | 3.0 | 3.0 | 8.20 | 1 | | 0.54 |
| 63 | 64 | 315 | 107 | | 2 | 4.0 | 3.0 | 8.50 | 1 | | 0.56 |
| 64 | 65 | 325 | 111 | | 3 | 3.0 | 3.5 | 8.70 | 0 | | 0.52 |
| 65 | 66 | 325 | 112 | | 4 | 3.5 | 3.5 | 8.92 | 0 | | 0.55 |
| 66 | 67 | 327 | 114 | | 3 | 3.0 | 3.0 | 9.02 | 0 | | 0.61 |
| 67 | 68 | 316 | 107 | | 2 | 3.5 | 3.5 | 8.64 | 1 | | 0.57 |
| 68 | 69 | 318 | 109 | | 3 | 3.5 | 4.0 | 9.22 | 1 | | 0.68 |
| 69 | 70 | 328 | 115 | | 4 | 4.5 | 4.0 | 9.16 | 1 | | 0.78 |
| 70 | 71 | 332 | 118 | | 5 | 5.0 | 5.0 | 9.64 | 1 | | 0.94 |

```
boxplot = df.boxplot(column=['CGPA'])
```

