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## **Practical 5**

### **Code:**

```
import matplotlib.pyplot as plt

import pandas as pd

import numpy as np

df=pd.read_csv('testmarks.csv')

rno=np.array(df['RollNo'])

eds=np.array(df['EDS'])

son=np.array(df['SON'])

dt=np.array(df['DT'])

et=np.array(df['ET'])

subject=['ET','DT','EDS','SON']

plt.figure(figsize=(15,15))

plt.subplot(3,4,1)

plt.plot(rno,eds)

plt.subplot(3,4,2)

plt.plot(rno,son)

plt.subplot(3,4,3)

plt.plot(rno,dt)

plt.subplot(3,4,4)
```

```
plt.plot(rno,et)

plt.show

max=[]

max.append(df['EDS'].max())

max.append(df['SON'].max())

max.append(df['DT'].max())

max.append(df['ET'].max())

print("max is:",max)

plt.subplot(3,4,5)

plt.plot(max,subject)

min=[]

min.append(df['EDS'].min())

min.append(df['SON'].min())

min.append(df['DT'].min())

min.append(df['ET'].min())

print("min is:",min)

plt.subplot(3,4,6)

plt.plot(min,subject)

avg=[]

avg.append(df['EDS'].mean())

avg.append(df['SON'].mean())

avg.append(df['ET'].mean())

avg.append(df['DT'].mean())

print("average is",avg)

plt.subplot(3,4,7)
```

```
plt.plot(avg,subject)

std=[]

std.append(df['EDS'].std())

std.append(df['ET'].std())

std.append(df['SON'].std())

std.append(df['DT'].std())

print("std is",std)

plt.subplot(3,4,8)

plt.plot(subject,std)

mode=[]

mode.append(df['EDS'].mode())

mode.append(df['ET'].mode())

mode.append(df['SON'].mode())

mode.append(df['DT'].mode())

print("mode is",mode)

plt.subplot(3,4,9)

plt.plot(subject,mode)

median=[]

median.append(df['EDS'].median())

median.append(df['ET'].median())

median.append(df['SON'].median())

median.append(df['DT'].median())

print("median is",median)

plt.subplot(3,4,10)

plt.plot(subject,median)
```

plt.show

Output:

