Name: Mahesh diwane

**Roll No**:-510 E1

PRN No:-202201050025

## **PRACTICAL 5 ON MATPLOTLIB**

#CODE:

#EXTRACTINNG THE FILE

import pandas as pd

import matplotlib.pyplot as plt

df=pd.read\_csv("testmarks1.csv")

print(df)

	RollNo	EDS	SON	DT	ET
0	801	43.05	27.79	28.70	27.79
1	802	43.47	28.52	28.98	27.89
2	803	42.24	28.16	28.16	25.63
3	804	39.24	26.16	26.16	26.16
4	805	40.90	26.03	27.27	25.65
5	806	39.47	26.31	26.31	25.21
6	807	41.68	25.63	27.79	25.46
7	808	42.19	27.61	28.13	26.21
8	809	44.75	28.35	29.83	28.21
9	810	46.95	28.88	31.30	28.53

**#PLOTTING LINE GRAPH** 

import numpy as np

import pandas as pd

import matplotlib.pyplot as plt

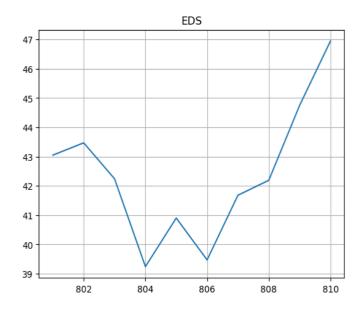
df=pd.read\_csv("testmarks1.csv")

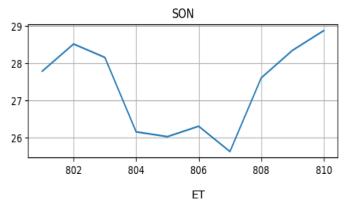
```
#Plot1
xpoints=np.array(df['RollNo'])
ypoints=np.array(df['EDS'])
plt.subplot(1,1,1)
plt.plot(xpoints,ypoints)
plt.title('EDS')
plt.grid()
plt.show()
#plot2
xp=np.array(df['RollNo'])
yp=np.array(df['SON'])
plt.subplot(2,1,2)
plt.plot(xp,yp)
plt.title('SON')
plt.grid()
plt.show()
#plot3
xp1=np.array(df['RollNo'])
yp1=np.array(df['DT'])
plt.subplot(3,1,3)
plt.plot(xp1,yp1)
plt.title('DT')
plt.show()
#plot4
xp2=np.array(df['RollNo'])
yp2=np.array(df['ET'])
```

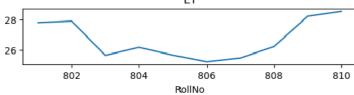
```
plt.subplot(4,1,4)
plt.plot(xp2,yp2)
plt.title('ET')
```

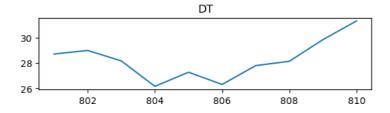
## plt.xlabel('RollNo')

plt.show()





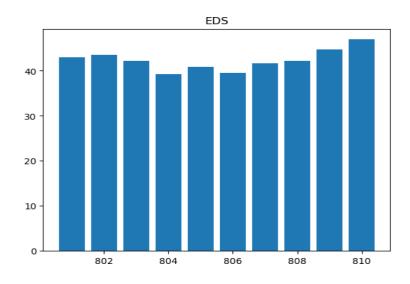


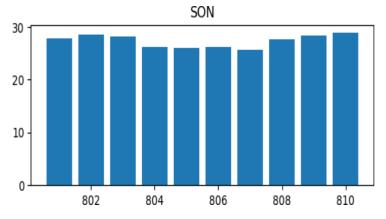


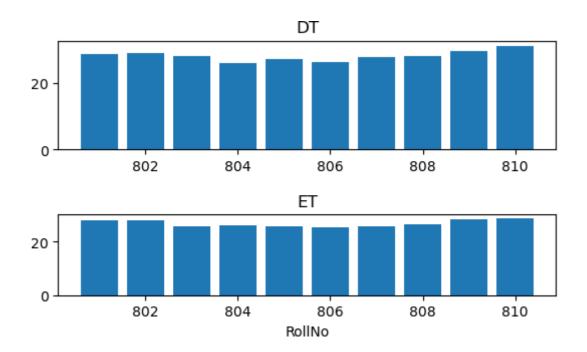
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
df=pd.read_csv("testmarks1.csv")
#Plot1
xpoints=np.array(df['RollNo'])
ypoints=np.array(df['EDS'])
plt.subplot(1,1,1)
plt.bar(xpoints,ypoints)
plt.title('EDS')
plt.show()
#plot2
xp=np.array(df['RollNo'])
yp=np.array(df['SON'])
plt.subplot(2,1,2)
plt.bar(xp,yp)
plt.title('SON')
plt.show()
#plot3
xp1=np.array(df['RollNo'])
yp1=np.array(df['DT'])
plt.subplot(3,1,3)
plt.bar(xp1,yp1)
plt.title('DT')
plt.show()
```

```
#plot4
xp2=np.array(df['RollNo'])
yp2=np.array(df['ET'])
plt.subplot(4,1,4)
plt.bar(xp2,yp2)
plt.title('ET')
```

plt.xlabel('RollNo')
plt.show()







## # Plotting the line plot

```
df.plot(x='RollNo', y=['EDS', 'SON', 'DT', 'ET'])
plt.xlabel('Roll Number')
plt.ylabel('Values')
plt.title('Line Plot')
plt.legend(['EDS', 'SON', 'DT', 'ET'])
plt.show()
```

