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Roll No: 553

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Subject: EDS

```
import matplotlib.pyplot as plt
import numpy as np
import pandas as pd
df=pd.read csv('/content/testmarks1.csv')
print(df)
r no=[]
foc mrk=[]
eds mrk=[]
son mrk=[]
phy mrk=[]
sub=['foc','eds','son','phy']
r no=np.array(df['RollNO'])
foc mrk=np.array(df['FOC'])
eds mrk=np.array(df['EDS'])
son mrk=np.array(df['SON'])
phy mrk=np.array(df['PHY'])
max mrk=[]
min mrk=[]
avg mrk=[]
max mrk.append(max(foc mrk))
max_mrk.append(max(eds_mrk))
max mrk.append(max(son mrk))
max mrk.append(max(phy mrk))
min mrk.append(min(foc mrk))
min mrk.append(min(eds mrk))
min mrk.append(min(son mrk))
min mrk.append(min(phy mrk))
avg mrk.append(sum(foc mrk)/10)
avg mrk.append(sum(eds mrk)/10)
avg mrk.append(sum(son mrk)/10)
avg_mrk.append(sum(phy_mrk)/10)
mo803=[foc mrk[2],eds mrk[2],son mrk[2],phy mrk[2]]
mo804=[foc_mrk[3],eds_mrk[3],son_mrk[3],phy_mrk[3]]
mo805=[foc mrk[4],eds mrk[4],son mrk[4],phy mrk[4]]
```

```
print(max mrk,min mrk,avg mrk)
plt.xlabel("Roll No")
plt.ylabel("Marks")
plt.title("FOC marks")
plt.plot(r no, foc mrk, 'o-r')
plt.show()
plt.xlabel("Roll No")
plt.ylabel("Marks")
plt.title("EDS marks")
plt.bar(r no,eds mrk)
plt.show()
plt.xlabel("Roll No")
plt.ylabel("Marks")
plt.title("SON marks")
plt.barh(r no,son mrk,color='hotpink')
plt.show()
plt.xlabel("Roll No")
plt.ylabel("Marks")
plt.title("PHY marks")
plt.plot(r no,phy mrk,'o:g')
plt.show()
plt.xlabel("Roll No")
plt.ylabel("Marks")
plt.title("MAX marks")
plt.bar(sub,max mrk,color='green')
plt.show()
plt.xlabel("Roll No")
plt.ylabel("Marks")
plt.title("MIN marks")
plt.plot(min mrk, 'o:y')
plt.show()
plt.xlabel("Roll No")
plt.ylabel("Marks")
```

```
plt.title("AVG marks")
plt.plot(avg_mrk,'o:b')
plt.show()

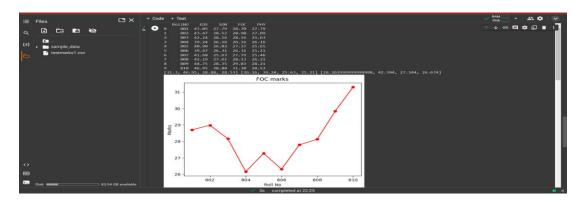
plt.xlabel('roll no 803 marks')
plt.pie(mo803,labels=sub)
plt.show()

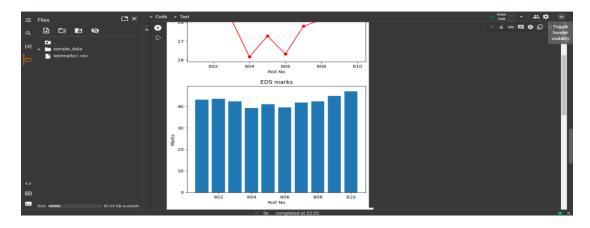
plt.xlabel('roll no 804 marks')
expl=[0.3,0,0,0]
plt.pie(mo804,labels=sub,explode=expl)
plt.show()

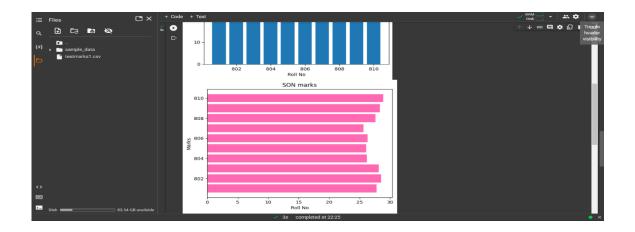
plt.xlabel('roll no 805 marks')
expl2=[0,0.2,0,0]
plt.pie(mo805,labels=sub,explode=expl2,shadow=True)
plt.show()
```

Result:

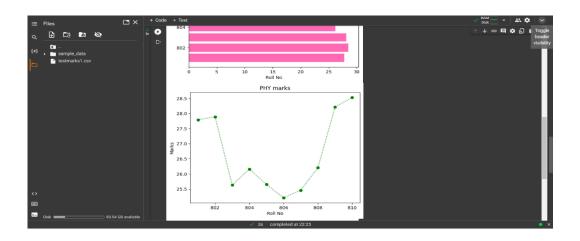
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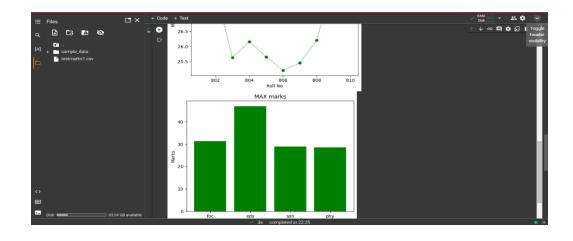




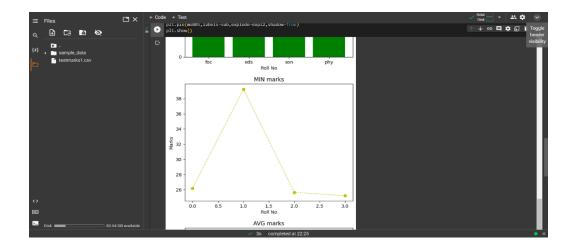


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