Python Programming (MCA 372)

Lab Assignment -01

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SUBMITTED TO

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1- Create Three graphs and in those add two more graphs or extra subjects.

```
from mpl_toolkits.mplot3d import Axes3D
fig=plt.figure(figsize=(20,15))
ax=fig.add_subplot(121,projection='3d')
ax1=fig.add_subplot(122,projection='3d')

z_sci =np.zeros(len(data['id']))
z_maths=np.ones(len(data['id']))
z_hist=np.multiply(z_maths,2)

ax.plot(data['id'],data['Science'],z_sci,color='green',label='Science',linewidth = 2)
ax.plot(data['id'],data['Maths'],z_maths,color='red',linestyle="dashdot",label='Maths', linewidth = 4)
ax.plot(data['id'],data['History'],z_hist,color='blue',linestyle="dotted",label='History', linewidth = 4)
ax1.plot(data['id'],data['English'],z_eng,color='blue',linestyle="dashdot",label='History', linewidth = 4)
ax1.plot(data['id'],data['History'],z_hist,color='green',linestyle="dotted",label='History', linewidth = 4)

for i in range(len(data['id'])):
    ax.text(data['id'].values[i],data['Science'].values[i],z_sci[i],data['Science'].values[i])
    ax.text(data['id'].values[i],data['Maths'].values[i],z_maths[i],data['Maths'].values[i])
    ax.text(data['id'].values[i],data['History'].values[i],z_hist[i],data['History'].values[i])

ax.set_xlabel('ID')
ax.set_ylabel('Marks')
ax.set_zticks([0,1,2])
ax.set_zticklabels(["Science","Maths","History"])
ax.set_title('3d Marks Graph')
ax.legend()
plt.show()
✓ 0.4s
```