```
from matplotlib import pyplot as plt
from matplotlib import style
style.use('ggplot')
print("----------WELCOME TO THE GRAPH MAKER----------")

def bargraph():
    typer=int(input('''
What type of graph do you want:\n\t1.Vetical\n\t2.Horizontal\n\tChoice:'''))
    if typer==1:
        print('----------BAR GRAPH----------')
        x=[]
        y=[]
        amount=int(input("Amount of bars:"))
        fina=amount+1
        for item in range(1,fina):
            barlabel=input("Enter bar label:")
            x.append(barlabel)
            barvalue=int(input("Enter bar value:"))
            y.append(barvalue)
        xlabe=input("X Lable:")
        ylabe=input("Y Lable:")
        titlee=input('Graph title:')
        #space=float(input('Enter spacing between bars(spacing is from 0 to 1):'))
        widtha=float(input('Enter width of bars(width is from 0 to 1):'))
        print('''
        \nWhen asked to choose a color you will have to choose from the available colors:
        \n\tb=blue\n\tg=green\n\tr=red\n\tc=cyan\n\tm=magenta\n\ty=yellow\n\tk=black\n\tw=white
        ''')
        back=input("Background color:")
        bar=input("Bar color:")
        str(back)
        str(bar)
        str(xlabe)
        str(ylabe)
        str(titlee)
        #str(space)
        str(widtha)
        ax=plt.axes()
        ax.set_facecolor(back)
        plt.xlabel(xlabe)
        plt.ylabel(ylabe)
        plt.title(titlee)
        q=input("Do you want a grid? Answer in Yes or No:")
        if q=="Yes":
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        grida=input("Color of grid:")
        str(grida)
        plt.grid(color=grida)
        plt.bar(x,y,color=bar,width=widtha)
        plt.show()
    elif q=="No":
         plt.bar(x,y,color=bar,width=widtha)
         plt.show()
if typer==2:
    print('----------HORIZONTAL BAR GRAPH----------')
    x=[]
    y=[]
    amount=int(input("Amount of bars:"))
    fina=amount+1
    for item in range(1,fina):
        barlabel=input("Enter bar label:")
        x.append(barlabel)
        barvalue=int(input("Enter bar value:"))
        y.append(barvalue)
    xlabe=input("X Lable:")
    ylabe=input("Y Lable:")
    titlee=input('Graph title:')
    #space=float(input('Enter spacing between bars(spacing is from 0 to 1):'))
    #widtha=float(input('Enter width of bars(width is from 0 to 1):'))
    print('''
    \nWhen asked to choose a color you will have to choose from the available colors:
    \n\tb=blue\n\tg=green\n\tr=red\n\tc=cyan\n\tm=magenta\n\ty=yellow\n\tk=black\n\tw=white
    ''')
    back=input("Background color:")
    bar=input("Bar color:")
    str(back)
    str(bar)
    str(xlabe)
    str(ylabe)
    str(titlee)
    #str(space)
    #str(widtha)
    ax=plt.axes()
    ax.set_facecolor(back)
    plt.xlabel(xlabe)
    plt.ylabel(ylabe)
    plt.title(titlee)
    q=input("Do you want a grid? Answer in Yes or No:")
    if q=="Yes":
```

```
            grida=input("Color of grid:")
            str(grida)
            plt.grid(color=grida)
            plt.barh(x,y,color=bar)
            plt.show()
        elif q=="No":
             plt.barh(x,y,color=bar)
             plt.show()



def linegraph():
    print('---------------------------------- LINE GRAPH-------------------------------------')
    typer=int(input('''
    How many lines do you want to have?:\n\n\t1.One line\n\t2.Two lines\n\t3.Three
lines\n\t4.Four lines\n\t5.Five lines\n\tEnter Choice:'''))
    if typer==1:
        x=[]
        y=[]
        points=int(input("Enter how many points on line:"))
        pointsfin=points+1
        for item in range(1,pointsfin):
            xv=input("Enter x value:")
            x.append(xv)
            yv=int(input("Enter y value:"))
            y.append(yv)
        xlabe=input("X Lable:")
        ylabe=input("Y Lable:")
        titlee=input('Graph title:')
        #space=float(input('Enter spacing between bars(spacing is from 0 to 1):'))
        widtha=float(input('Enter width of lines(width is from 0 to 1):'))
        print('''
        \nWhen asked to choose a color you will have to choose from the available colors:
        \n\tb=blue\n\tg=green\n\tr=red\n\tc=cyan\n\tm=magenta\n\ty=yellow\n\tk=black\n\tw=white
        ''')
        back=input("Background color:")
        line=input("Line color:")
        str(back)
        str(line)
        str(xlabe)
        str(ylabe)
        str(titlee)
        #str(space)
        str(widtha)
```

```
    ax=plt.axes()
    ax.set_facecolor(back)
    plt.xlabel(xlabe)
    plt.ylabel(ylabe)
    plt.title(titlee)
    q=input("Do you want a grid? Answer in Yes or No:")
    if q=="Yes":
        grida=input("Color of grid:")
        str(grida)
        plt.grid(color=grida)
        plt.plot(x,y,color=line,linewidth=widtha)
        plt.show()
    elif q=="No":
         plt.plot(x,y,color=line,linewidth=widtha)
         plt.show()
    else:
        print("Not a valid response")
elif typer==2:
    x=[]
    y=[]
    x2=[]
    y2=[]
    points=int(input("Enter how many points on line one:"))
    pointsfin=points+1
    for item in range(1,pointsfin):
        xv=input("Enter x value:")
        x.append(xv)
        yv=int(input("Enter y value:"))
        y.append(yv)
    points2=int(input("Enter how many points on line two:"))
    pointsfin2=points2+1
    for item in range(1,pointsfin2):
        xv2=input("Enter x value:")
        x2.append(xv2)
        yv2=int(input("Enter y value:"))
        y2.append(yv2)
    xlabe=input("X Lable:")
    ylabe=input("Y Lable:")
    titlee=input('Graph title:')
    #space=float(input('Enter spacing between bars(spacing is from 0 to 1):'))
    widtha=float(input('Enter width of lines(width is from 0 to 1):'))
    print('''
    \nWhen asked to choose a color you will have to choose from the available colors:
    \n\tb=blue\n\tg=green\n\tr=red\n\tc=cyan\n\tm=magenta\n\ty=yellow\n\tk=black\n\tw=white
```

```
    ''')
    back=input("Background color:")
    line=input("Line color for line one:")
    line2=input("Line color for line two:")
    str(back)
    str(line)
    str(line2)
    str(xlabe)
    str(ylabe)
    str(titlee)
    #str(space)
    str(widtha)
    ax=plt.axes()
    ax.set_facecolor(back)
    plt.xlabel(xlabe)
    plt.ylabel(ylabe)
    plt.title(titlee)
    q=input("Do you want a grid? Answer in Yes or No:")
    if q=="Yes":
        grida=input("Color of grid:")
        str(grida)
        plt.grid(color=grida)
        plt.plot(x,y,color=line,linewidth=widtha)
        plt.plot(x2,y2,color=line2,linewidth=widtha)
        plt.show()
    elif q=="No":
         plt.plot(x,y,color=line,linewidth=widtha)
         plt.plot(x2,y2,color=line2,linewidth=widtha)
         plt.show()
elif typer==3:
    x=[]
    y=[]
    x2=[]
    y2=[]
    x3=[]
    y3=[]
    points=int(input("Enter how many points on line one:"))
    pointsfin=points+1
    for item in range(1,pointsfin):
        xv=input("Enter x value:")
        x.append(xv)
        yv=int(input("Enter y value:"))
        y.append(yv)
    points2=int(input("Enter how many points on line two:"))
```

```
pointsfin2=points2+1
for item in range(1,pointsfin2):
    xv2=input("Enter x value:")
    x2.append(xv2)
    yv2=int(input("Enter y value:"))
    y2.append(yv2)
points3=int(input("Enter how many points on line three:"))
pointsfin3=points3+1
for item in range(1,pointsfin3):
    xv3=input("Enter x value:")
    x3.append(xv3)
    yv3=int(input("Enter y value:"))
    y3.append(yv3)
xlabe=input("X Lable:")
ylabe=input("Y Lable:")
titlee=input('Graph title:')
#space=float(input('Enter spacing between bars(spacing is from 0 to 1):'))
widtha=float(input('Enter width of lines(width is from 0 to 1):'))
print('''
\nWhen asked to choose a color you will have to choose from the available colors:
\n\tb=blue\n\tg=green\n\tr=red\n\tc=cyan\n\tm=magenta\n\ty=yellow\n\tk=black\n\tw=white
''')
back=input("Background color:")
line=input("Line color for line one:")
line2=input("Line color for line two:")
line3=input("Line color for line three:")
str(back)
str(line)
str(line2)
str(line3)
str(xlabe)
str(ylabe)
str(titlee)
#str(space)
str(widtha)
ax=plt.axes()
ax.set_facecolor(back)
plt.xlabel(xlabe)
plt.ylabel(ylabe)
plt.title(titlee)
q=input("Do you want a grid? Answer in Yes or No:")
if q=="Yes":
    grida=input("Color of grid:")
    str(grida)
```

```
        plt.grid(color=grida)
        plt.plot(x,y,color=line,linewidth=widtha)
        plt.plot(x2,y2,color=line2,linewidth=widtha)
        plt.plot(x3,y3,color=line3,linewidth=widtha)
        plt.show()
    elif q=="No":
         plt.plot(x,y,color=line,linewidth=widtha)
         plt.plot(x2,y2,color=line2,linewidth=widtha)
         plt.plot(x3,y3,color=line3,linewidth=widtha)
         plt.show()
elif typer==4:
    x=[]
    y=[]
    x2=[]
    y2=[]
    x3=[]
    y3=[]
    x4=[]
    y4=[]
    points=int(input("Enter how many points on line one:"))
    pointsfin=points+1
    for item in range(1,pointsfin):
        xv=input("Enter x value:")
        x.append(xv)
        yv=int(input("Enter y value:"))
        y.append(yv)
    points2=int(input("Enter how many points on line two:"))
    pointsfin2=points2+1
    for item in range(1,pointsfin2):
        xv2=input("Enter x value:")
        x2.append(xv2)
        yv2=int(input("Enter y value:"))
        y2.append(yv2)
    points3=int(input("Enter how many points on line three:"))
    pointsfin3=points3+1
    for item in range(1,pointsfin3):
        xv3=input("Enter x value:")
        x3.append(xv3)
        yv3=int(input("Enter y value:"))
        y3.append(yv3)
    points4=int(input("Enter how many points on line four:"))
    pointsfin4=points4+1
    for item in range(1,pointsfin4):
        xv4=input("Enter x value:")
```

```
    x4.append(xv4)
    yv4=int(input("Enter y value:"))
    y4.append(yv4)
xlabe=input("X Lable:")
ylabe=input("Y Lable:")
titlee=input('Graph title:')
#space=float(input('Enter spacing between bars(spacing is from 0 to 1):'))
widtha=float(input('Enter width of lines(width is from 0 to 1):'))
print('''
\nWhen asked to choose a color you will have to choose from the available colors:
\n\tb=blue\n\tg=green\n\tr=red\n\tc=cyan\n\tm=magenta\n\ty=yellow\n\tk=black\n\tw=white
''')
back=input("Background color:")
line=input("Line color for line one:")
line2=input("Line color for line two:")
line3=input("Line color for line three:")
line4=input("Line color for line four:")
str(back)
str(line)
str(line2)
str(line3)
str(line4)
str(xlabe)
str(ylabe)
str(titlee)
#str(space)
str(widtha)
ax=plt.axes()
ax.set_facecolor(back)
plt.xlabel(xlabe)
plt.ylabel(ylabe)
plt.title(titlee)
q=input("Do you want a grid? Answer in Yes or No:")
if q=="Yes":
    grida=input("Color of grid:")
    str(grida)
    plt.grid(color=grida)
    plt.plot(x,y,color=line,linewidth=widtha)
    plt.plot(x2,y2,color=line2,linewidth=widtha)
    plt.plot(x3,y3,color=line3,linewidth=widtha)
    plt.plot(x4,y4,color=line4,linewidth=widtha)
    plt.show()
elif q=="No":
     plt.plot(x,y,color=line,linewidth=widtha)
```

```
            plt.plot(x2,y2,color=line2,linewidth=widtha)
            plt.plot(x3,y3,color=line3,linewidth=widtha)
            plt.plot(x4,y4,color=line4,linewidth=widtha)
            plt.show()
        else:
            print("----------------INVALID CHOICE------------")

    elif typer==5:
        x=[]
        y=[]
        x2=[]
        y2=[]
        x3=[]
        y3=[]
        x4=[]
        y4=[]
        x5=[]
        y5=[]
        points=int(input("Enter how many points on line one:"))
        pointsfin=points+1
        for item in range(1,pointsfin):
            xv=input("Enter x value:")
            x.append(xv)
            yv=int(input("Enter y value:"))
            y.append(yv)
        points2=int(input("Enter how many points on line two:"))
        pointsfin2=points2+1
        for item in range(1,pointsfin2):
            xv2=input("Enter x value:")
            x2.append(xv2)
            yv2=int(input("Enter y value:"))
            y2.append(yv2)
        points3=int(input("Enter how many points on line three:"))
        pointsfin3=points3+1
        for item in range(1,pointsfin3):
            xv3=input("Enter x value:")
            x3.append(xv3)
            yv3=int(input("Enter y value:"))
            y3.append(yv3)
        points4=int(input("Enter how many points on line four:"))
        pointsfin4=points4+1
        for item in range(1,pointsfin4):
            xv4=input("Enter x value:")
            x4.append(xv4)
```

```
    yv4=int(input("Enter y value:"))
    y4.append(yv4)
points5=int(input("Enter how many points on line five:"))
pointsfin5=points5+1
for item in range(1,pointsfin5):
    xv5=input("Enter x value:")
    x5.append(xv5)
    yv5=int(input("Enter y value:"))
    y5.append(yv5)
xlabe=input("X Lable:")
ylabe=input("Y Lable:")
titlee=input('Graph title:')
#space=float(input('Enter spacing between bars(spacing is from 0 to 1):'))
widtha=float(input('Enter width of lines(width is from 0 to 1):'))
print('''
\nWhen asked to choose a color you will have to choose from the available colors:
\n\tb=blue\n\tg=green\n\tr=red\n\tc=cyan\n\tm=magenta\n\ty=yellow\n\tk=black\n\tw=white
''')
back=input("Background color:")
line=input("Line color for line one:")
line2=input("Line color for line two:")
line3=input("Line color for line three:")
line4=input("Line color for line four:")
line5=input("Line color for line five:")
str(back)
str(line)
str(line2)
str(line3)
str(line4)
str(line5)
str(xlabe)
str(ylabe)
str(titlee)
#str(space)
str(widtha)
ax=plt.axes()
ax.set_facecolor(back)
plt.xlabel(xlabe)
plt.ylabel(ylabe)
plt.title(titlee)
q=input("Do you want a grid? Answer in Yes or No:")
if q=="Yes":
    grida=input("Color of grid:")
    str(grida)
```

```
            plt.grid(color=grida)
            plt.plot(x,y,color=line,linewidth=widtha)
            plt.plot(x2,y2,color=line2,linewidth=widtha)
            plt.plot(x3,y3,color=line3,linewidth=widtha)
            plt.plot(x4,y4,color=line4,linewidth=widtha)
            plt.plot(x5,y5,color=line5,linewidth=widtha)
            plt.show()
        elif q=="No":
             plt.plot(x,y,color=line,linewidth=widtha)
             plt.plot(x2,y2,color=line2,linewidth=widtha)
             plt.plot(x3,y3,color=line3,linewidth=widtha)
             plt.plot(x4,y4,color=line4,linewidth=widtha)
             plt.plot(x5,y5,color=line5,linewidth=widtha)
             plt.show()
        else:
            print("----------------INVALID CHOICE------------")
    else:
            print("----------------INVALID CHOICE------------")



while True:
    choice=int(input('''
    \n1.Create Bar Graph
    \n2.Create Line Graph
    \n3.Exit
    \nEnter Choice:'''))

    if choice==1:
        bargraph()
    elif choice==2:
        linegraph()
    elif choice==3:
        print('----------------------EXITING|GOOD BYE-------------------------------')
        break
    else:
        print("----------------INVALID CHOICE------------")
```