

"""

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"""

```
from tkinter import *
import tkinter as tk
import pandas as pd
from pandas import DataFrame
import matplotlib.pyplot as plt
from matplotlib.figure import Figure
from matplotlib.backends.backend_tkagg import (FigureCanvasTkAgg,
NavigationToolbar2Tk)

window = tk.Tk()
window.geometry("1500x1000")
window.configure(bg='Black')
window.title('Data Analyser')

label = tk.Label(window, text = "GRAPH IT!",font=("Silom",30), background=("LightSeaGreen"),
foreground=("White")).pack()

canvas1 = tk.Canvas(window, width = 1000, height = 350, background="Black") # create the
canvas
canvas1.pack()

label1= tk.Label(window, text = "Enter x axis elements (space separated):", font=("Andale
Mono", 15), background=("Black"), foreground=("White"))
canvas1.create_window(200, 40, window=label1)

entry1 = tk.Entry (window)# create the entry box
canvas1.create_window(550, 43, window=entry1)

label2= tk.Label(window, text = "Enter y axis elements (space separated):", font=("Andale
Mono", 15), background=("Black"), foreground=("White"))
canvas1.create_window(200, 90, window=label2)

entry2 = tk.Entry (window)# create the entry box
canvas1.create_window(550, 93, window=entry2)
```

```
label3= tk.Label(window, text = "Choose a graph \n Bar Graph, Scatter Plot, Line Chart:",  
font=("Andale Mono", 15), background=("Black"), foreground=("White"), anchor='w')  
canvas1.create_window(180, 140, window=label3)
```

```
entry3 = tk.Entry (window)# create the entry box  
canvas1.create_window(550, 143, window=entry3)
```

```
label4= tk.Label(window, text = "Choose a Color \n blue, green, red, cyan, \n magenta, yellow,  
black, white:", font=("Andale Mono", 15), background=("Black"), foreground=("White"))  
canvas1.create_window(180, 200, window=label4)
```

```
entry4 = tk.Entry (window)# create the entry box  
canvas1.create_window(550, 213, window=entry4)
```

```
label5= tk.Label(window, text = "x axis name:", font=("Andale Mono", 15), background=("Black"),  
foreground=("White"))  
canvas1.create_window(180, 260, window=label5)
```

```
entry5 = tk.Entry (window)# create the entry box  
canvas1.create_window(550, 263, window=entry5)
```

```
label6= tk.Label(window, text = "y axis name:", font=("Andale Mono", 15), background=("Black"),  
foreground=("White"))  
canvas1.create_window(180, 310, window=label6)
```

```
entry6 = tk.Entry (window)# create the entry box  
canvas1.create_window(550, 313, window=entry6)  
#-----
```

```
def graph():  
    # the figure that will contain the plot  
    fig = Figure(figsize = (10, 10),  
        dpi = 100)
```

```
    x = (entry1.get()).split()  
    y = (entry2.get()).split()  
    gtype=(entry3.get()).lower()  
    col=(entry4.get()).lower()  
    xtitle=(entry5.get())  
    ytitle=(entry6.get())
```

```
    if col=="blue":  
        c="b"
```

```

elif col=="green":
    c="g"
elif col=="red":
    c="r"
elif col=="cyan":
    c="c"
elif col=="magenta":
    c="m"
elif col=="yellow":
    c="y"
elif col=="black":
    c="k"
elif col=="white":
    c="w"
plot1 = fig.add_subplot(111)

if gtype=="bar graph":
    plot1.bar(x,y, color=c)
elif gtype=="scatter plot":
    plot1.scatter(x,y, color=c)
elif gtype=="line chart":
    plot1.plot(x,y, color=c)
plot1.set_xlabel(xtitle)
plot1.set_ylabel(ytitle)

canvas1 = FigureCanvasTkAgg(fig,
                             master = window)
canvas1.draw()

canvas1.get_tk_widget().pack()

toolbar = NavigationToolbar2Tk(canvas1,
                              window)
toolbar.update()

canvas1.get_tk_widget().pack()

# button that displays the plot
plot_button = tk.Button(window,
                        command = graph,
                        height = 2,

```

```
        width = 10,  
        text = "Plot",  
        highlightbackground="Black", fg="Black")  
canvas1.create_window(800, 313, window=plot_button)
```

```
window.mainloop()
```