

NAME : RAIMA ZULFIQAR AHMED

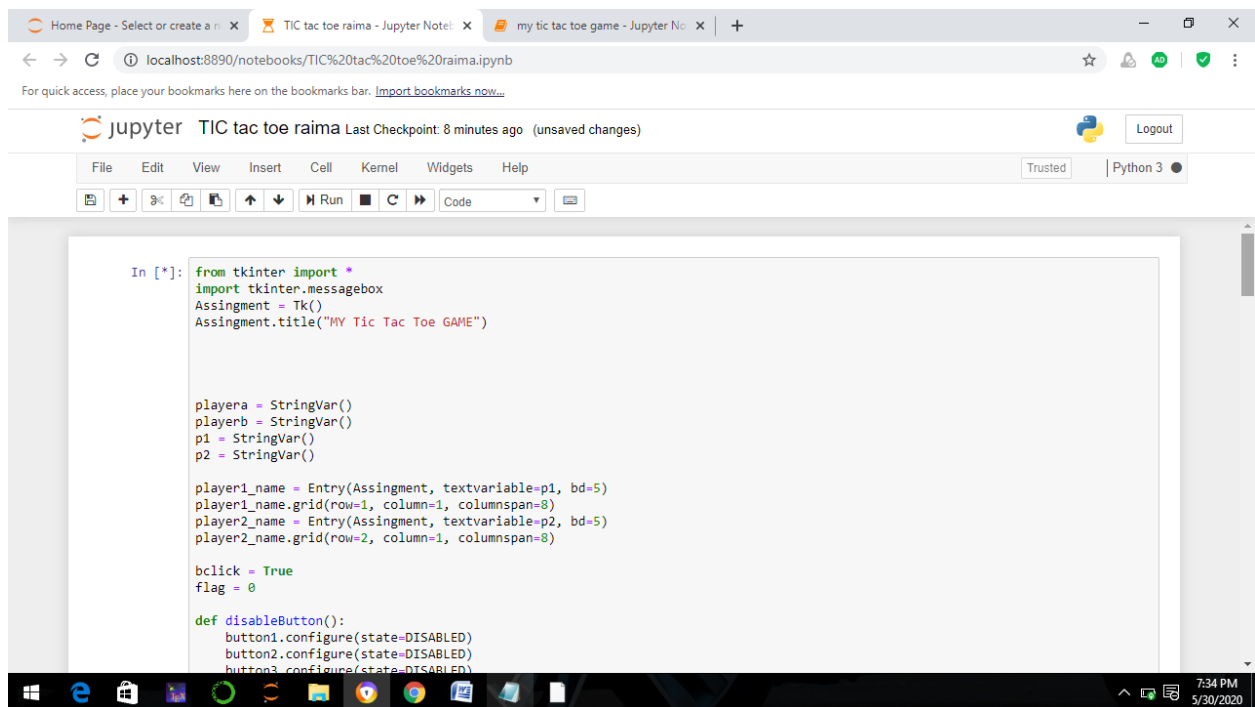
ID: 14321

SUBJECT: DATA SCIENCE

SUBMITTED TO : SIR AYUB

DEP : 5TH (BS)S.E

ASSIGNMENT:



The screenshot shows a Jupyter Notebook interface with the following code in a cell:

```
In [*]: from tkinter import *
import tkinter.messagebox
Assingment = Tk()
Assingment.title("MY Tic Tac Toe GAME")

playera = StringVar()
playerb = StringVar()
p1 = StringVar()
p2 = StringVar()

player1_name = Entry(Assingment, textvariable=p1, bd=5)
player1_name.grid(row=1, column=1, columnspan=8)
player2_name = Entry(Assingment, textvariable=p2, bd=5)
player2_name.grid(row=2, column=1, columnspan=8)

bclick = True
flag = 0

def disableButton():
    button1.configure(state=DISABLED)
    button2.configure(state=DISABLED)
    button3.configure(state=DISABLED)
```

The interface includes a browser address bar showing the local host URL, a Jupyter logo, and a menu bar with options like File, Edit, View, Insert, Cell, Kernel, Widgets, and Help. The system tray at the bottom shows the time as 7:34 PM on 5/30/2020.

Home Page - Select or create a n... x TIC tac toe raima - Jupyter Note... x my tic tac toe game - Jupyter No... x +

localhost:8890/notebooks/TIC%20tac%20toe%20raima.ipynb

For quick access, place your bookmarks here on the bookmarks bar. [Import bookmarks now...](#)

jupyter TIC tac toe raima Last Checkpoint: 8 minutes ago (autosaved) Logout

File Edit View Insert Cell Kernel Widgets Help Notebook saved Trusted Python 3

```
flag = 0

def disableButton():
    button1.configure(state=DISABLED)
    button2.configure(state=DISABLED)
    button3.configure(state=DISABLED)
    button4.configure(state=DISABLED)
    button5.configure(state=DISABLED)
    button6.configure(state=DISABLED)
    button7.configure(state=DISABLED)
    button8.configure(state=DISABLED)
    button9.configure(state=DISABLED)

def btnClick(buttons):
    global bclick, flag, player2_name, player1_name, playerb, playera

    if buttons["text"] == " " and bclick == True:
        buttons["text"] = "x"
        bclick = False
        playerb = p2.get() + " Wins!".title()
        playera = p1.get() + " Wins!".title()
        checkForWin()
```

7:35 PM 5/30/2020

Home Page - Select or create a n... x TIC tac toe raima - Jupyter Note... x my tic tac toe game - Jupyter No... x +

localhost:8890/notebooks/TIC%20tac%20toe%20raima.ipynb

For quick access, place your bookmarks here on the bookmarks bar. [Import bookmarks now...](#)

jupyter TIC tac toe raima Last Checkpoint: 8 minutes ago (autosaved) Logout

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3

```
elif buttons["text"] == "" and bclick == False:
    buttons["text"] = "t"
    bclick = True
    checkForWin()
    flag += 1
else:
    tkinter.messagebox.showinfo("Tic-Tac-Toe", " button is already Clicked!")

def checkForWin():
    if (button1['text'] == 'x' and button2['text'] == 'x' and button3['text'] == 'x' or
        button4['text'] == 'x' and button5['text'] == 'x' and button6['text'] == 'x' or
        button7['text'] == 'x' and button8['text'] == 'x' and button9['text'] == 'x' or
        button1['text'] == 'x' and button5['text'] == 'x' and button9['text'] == 'x' or
        button3['text'] == 'x' and button5['text'] == 'x' and button7['text'] == 'x' or
        button1['text'] == 'x' and button2['text'] == 'x' and button3['text'] == 'x' or
        button1['text'] == 'x' and button4['text'] == 'x' and button7['text'] == 'x' or
        button2['text'] == 'x' and button5['text'] == 'x' and button8['text'] == 'x' or
        button7['text'] == 'x' and button6['text'] == 'x' and button9['text'] == 'x'):
        disableButton()
        tkinter.messagebox.showinfo("Tic-Tac-Toe", "playera")
```

7:35 PM 5/30/2020

Home Page - Select or create a n... x TIC tac toe raima - Jupyter Note... x my tic tac toe game - Jupyter No... x +

localhost:8890/notebooks/TIC%20tac%20toe%20raima.ipynb

For quick access, place your bookmarks here on the bookmarks bar. [Import bookmarks now...](#)

jupyter TIC tac toe raima Last Checkpoint: 8 minutes ago (autosaved) Logout

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3

```
elif (button1['text'] == 't' and button2['text'] == 't' and button3['text'] == 't' or
      button4['text'] == 't' and button5['text'] == 't' and button6['text'] == 't' or
      button7['text'] == 't' and button8['text'] == 't' and button9['text'] == 't' or
      button1['text'] == 't' and button5['text'] == 't' and button9['text'] == 't' or
      button3['text'] == 't' and button5['text'] == 't' and button7['text'] == 't' or
      button1['text'] == 't' and button2['text'] == 't' and button3['text'] == 't' or
      button1['text'] == 't' and button4['text'] == 't' and button7['text'] == 't' or
      button2['text'] == 't' and button5['text'] == 't' and button8['text'] == 't' or
      button7['text'] == 't' and button6['text'] == 't' and button9['text'] == 't'):
    disableButton()
    tkinter.messagebox.showinfo("Tic-Tac-Toe", "playerb")

elif(flag == 8):
    tkinter.messagebox.showinfo("Tic-Tac-Toe", "It is a Tie")

def reset():
    button1['text']=""
    button2['text']=""
    button3['text']=""
    button4['text']=""
    button5['text']=""
    button6['text']=""
    button7['text']=""
    button8['text']=""
```

7:35 PM 5/30/2020

Home Page - Select or create a n... x TIC tac toe raima - Jupyter Note... x my tic tac toe game - Jupyter No... x +

localhost:8890/notebooks/TIC%20tac%20toe%20raima.ipynb

For quick access, place your bookmarks here on the bookmarks bar. [Import bookmarks now...](#)

jupyter TIC tac toe raima Last Checkpoint: 8 minutes ago (autosaved) Logout

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3

```
def reset():
    button1['text']=" "
    button2['text']=" "
    button3['text']=" "
    button4['text']=" "
    button5['text']=" "
    button6['text']=" "
    button7['text']=" "
    button8['text']=" "
    button9['text']=" "

    button1.configure(background="black")
    button2.configure(background="black")
    button3.configure(background="black")
    button4.configure(background="black")
    button5.configure(background="black")
    button6.configure(background="black")
    button7.configure(background="black")
    button8.configure(background="black")
    button9.configure(background="black")

def NewGame():
    reset()
    #player1_name=0
    #player2_name=0
```

7:35 PM 5/30/2020

Home Page - Select or create a n... x TIC tac toe raima - Jupyter Note... x my tic tac toe game - Jupyter No... x +

localhost:8890/notebooks/TIC%20tac%20toe%20raima.ipynb

For quick access, place your bookmarks here on the bookmarks bar. [Import bookmarks now...](#)

jupyter TIC tac toe raima Last Checkpoint: 8 minutes ago (autosaved) Logout

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3

```
buttons = StringVar()

label = Label(Assingment, text="player1:", font='Times 20 bold', bg='white', fg='red', height=1, width=10)
label.grid(row=1, column=0)

label = Label(Assingment, text="player 2 :", font='Times 20 bold', bg='white', fg='red', height=1, width=10)
label.grid(row=2, column=0)

btnReset=Button(Assingment, text="reset", font='Times 20 bold', bg='white', fg='red', height=1, width=10, command=reset)
btnReset.grid(row=10, column=1)

btnNewgame=Button(Assingment, text="newgame", font='Times 20 bold', bg='white', fg='red', height=1, width=10, command=NewGame)
btnNewgame.grid(row=10, column=0)

button1 = Button(Assingment, text=" ", font='Times 20 bold', bg='black', fg='red', height=4, width=10, command=lambda: btnClick)
button1.grid(row=3, column=0)

button2 = Button(Assingment, text=" ", font='Times 20 bold', bg='black', fg='red', height=4, width=10, command=lambda: btnClick)
button2.grid(row=3, column=1)

button3 = Button(Assingment, text=" ", font='Times 20 bold', bg='black', fg='red', height=4, width=10, command=lambda: btnClick(b
```

7:35 PM 5/30/2020

For quick access, place your bookmarks here on the bookmarks bar. [Import bookmarks now...](#)

```
button1.grid(row=3, column=0)

button2 = Button(Assingment, text=" ", font='Times 20 bold', bg='black', fg='red', height=4, width=10, command=lambda: btnClick(
button2.grid(row=3, column=1)

button3 = Button(Assingment, text=" ", font='Times 20 bold', bg='black', fg='red', height=4, width=10, command=lambda: btnClick(b
button3.grid(row=3, column=2)

button4 = Button(Assingment, text=" ", font='Times 20 bold', bg='black', fg='red', height=4, width=10, command=lambda: btnClick(l
button4.grid(row=4, column=0)

button5 = Button(Assingment, text=" ", font='Times 20 bold', bg='black', fg='white', height=4, width=10, command=lambda: btnCli
button5.grid(row=4, column=1)

button6 = Button(Assingment, text=" ", font='Times 20 bold', bg='black', fg='red', height=4, width=10, command=lambda: btnClick(l
button6.grid(row=4, column=2)

button7 = Button(Assingment, text=" ", font='Times 20 bold', bg='black', fg='red', height=4, width=10, command=lambda: btnClick(l
button7.grid(row=5, column=0)

button8 = Button(Assingment, text=" ", font='Times 20 bold', bg='black', fg='red', height=4, width=10, command=lambda: btnClick(l
button8.grid(row=5, column=1)

button9 = Button(Assingment, text=" ", font='Times 20 bold', bg='black', fg='red', height=4, width=10, command=lambda: btnClick(l
button9.grid(row=5, column=2)

Assingment.mainloop()
```

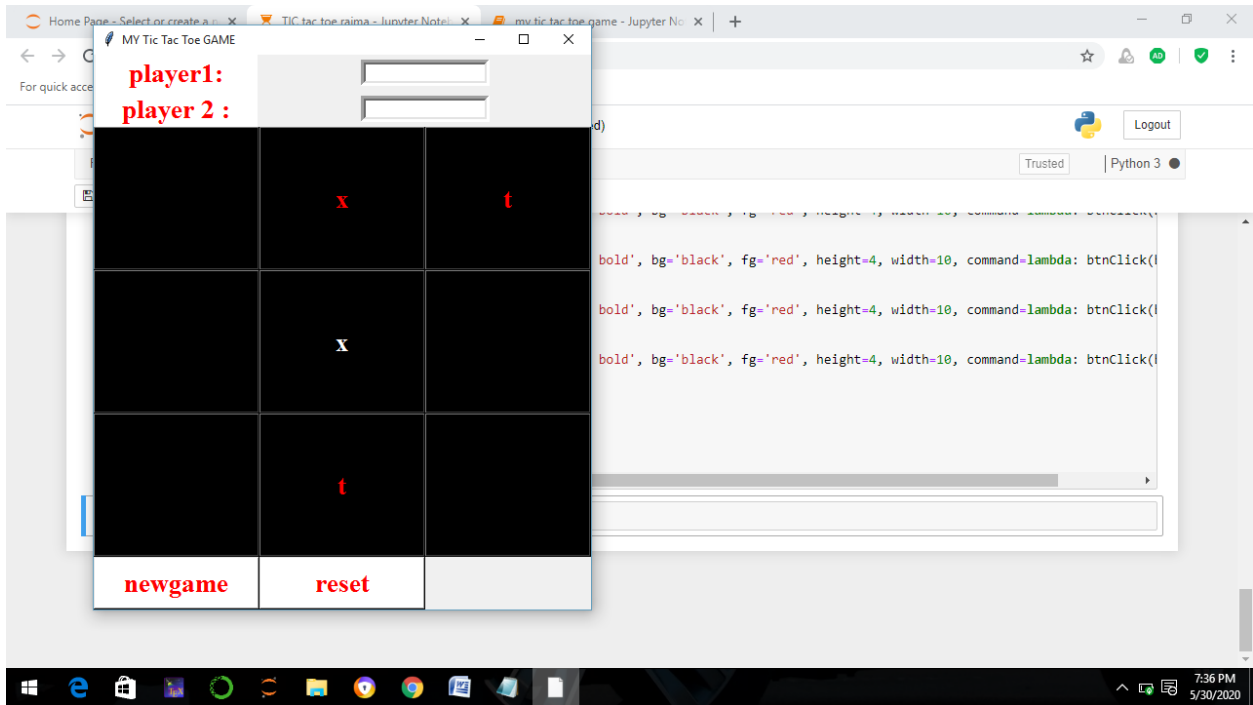
For quick access

MY Tic Tac Toe GAME

player1:

player 2 :

newgame	reset	



EXPLANATION:

❖ `from tkinter import *`

Firstly we are here to importing all the libraries of tkinter.

❖ `(import tkinter.messagebox)`

know all are ready for building window screen which shows each message.

❖ `Assingment = Tk()`

In the next code line we declared the variables which we use for creating main window and all the buttons.

❖ `[Assingment.title("MY Tic Tac Toe GAME")]`

know the heading of our game.

- ❖ `playera = StringVar()`
- ❖ `p1 = StringVar()`
- ❖ `p2 = StringVar()`
- ❖ `playerb = StringVar()`

we are giving names player 1
and player 2

- ❖ `player1_name = Entry(Assingment,
textvariable=p1, bd=5)`
- ❖ `player1_name.grid(row=1, column=1,
columnspan=8)`
- ❖ `player2_name = Entry(Assingment,
textvariable=p2, bd=5)`
- ❖ `player2_name.grid(row=2, column=1,
columnspan=8)`

creating the buttons of player 1 and player 2
where we write the names of the playes .

```
def disableButton():  
    button1.configure(state=DISABLED)  
    button2.configure(state=DISABLED)  
    button3.configure(state=DISABLED)  
    button4.configure(state=DISABLED)  
    button5.configure(state=DISABLED)  
    button6.configure(state=DISABLED)  
    button7.configure(state=DISABLED)  
    button8.configure(state=DISABLED)  
    button9.configure(state=DISABLED)
```

then we create the disable buttons function , once we press the button we will not press the next time.in the next step we are creating the click button for the first we click the button so it will display X and when we click the button again so the turn will be of T .and we are also calling the (checkforwin) function which we made below .

know checking all the possibilities come for X which are (123,456,789,159,357,258etc)then next checking the possibilities of T which are the same . know creating the reset function, in the reset function it will clear the alphabets as well as spaces. In the next code lines it will over right the same colour of which button is created. Next code is for the new game button function, in the new game button function it will reset the game also it will clear the names of player. In the last code lines we are just giving the buttons the size and colour ,font .and in the last we run the tic tac toe game .