

```
# -*- coding: utf-8 -*-
```

```
"""LOGIN.ipynb
```

Automatically generated by Colaboratory.

Original file is located at

https://colab.research.google.com/drive/1uRyKBrwEgn_PIfb6yQvgo6WykpfzaNj2

```
"""
```

```
from tkinter import *
```

```
import sqlite3
```

```
root = Tk()
```

```
root.title("Python: Simple Login Application")
```

```
width = 400
```

```
height = 280
```

```
screen_width = root.winfo_screenwidth()
```

```
screen_height = root.winfo_screenheight()
```

```
x = (screen_width/2) - (width/2)
```

```
y = (screen_height/2) - (height/2)
```

```
root.geometry("%dx%d+%d+%d" % (width, height, x, y))
```

```
root.resizable(0, 0)
```

```
#=====VARIABLES=====
```

```
USERNAME = StringVar()
```

```
PASSWORD = StringVar()
```

```
#=====FRAMES=====
```

```
Top = Frame(root, bd=2, relief=RIDGE)
```

```
Top.pack(side=TOP, fill=X)
```

```
Form = Frame(root, height=200)
```

```
Form.pack(side=TOP, pady=20)
```

```
#=====LABELS=====
```

```
lbl_title = Label(Top, text = "Python: Simple Login Application", font=('arial', 15))
```

```
lbl_title.pack(fill=X)
```

```
lbl_username = Label(Form, text = "Username:", font=('arial', 14), bd=15)
```

```
lbl_username.grid(row=0, sticky="e")
```

```
lbl_password = Label(Form, text = "Password:", font=('arial', 14), bd=15)
```

```
lbl_password.grid(row=1, sticky="e")
```

```
lbl_text = Label(Form)
```

```
lbl_text.grid(row=2, columnspan=2)
```

```
#=====ENTRY WIDGETS=====
```

```
username = Entry(Form, textvariable=USERNAME, font=(14))
```

```
username.grid(row=0, column=1)
```

```
password = Entry(Form, textvariable=PASSWORD, show="*", font=(14))
```

```
password.grid(row=1, column=1)
```

```
#=====METHODS=====
```

```
def Database():
```

```
    global conn, cursor
```

```
    conn = sqlite3.connect("pythontut.db")
```

```
    cursor = conn.cursor()
```

```
    cursor.execute("CREATE TABLE IF NOT EXISTS `member` (mem_id INTEGER NOT NULL PRIMARY KEY  
AUTOINCREMENT, username TEXT, password TEXT)")
```

```
    cursor.execute("SELECT * FROM `member` WHERE `username` = 'admin' AND `password` = 'admin'")
```

```
    if cursor.fetchone() is None:
```

```
        cursor.execute("INSERT INTO `member` (username, password) VALUES('admin', 'admin')")
```

```
        conn.commit()
```

```
def Login(event=None):
```

```
    Database()
```

```
    if USERNAME.get() == "" or PASSWORD.get() == "":
```

```

        lbl_text.config(text="Please complete the required field!", fg="red")
    else:
        cursor.execute("SELECT * FROM `member` WHERE `username` = ? AND `password` = ?", (USERNAME.get(),
        PASSWORD.get()))

        if cursor.fetchone() is not None:
            HomeWindow()
            USERNAME.set("")
            PASSWORD.set("")
            lbl_text.config(text="")
        else:
            lbl_text.config(text="Invalid username or password", fg="red")
            USERNAME.set("")
            PASSWORD.set("")

    cursor.close()
    conn.close()

```

#=====BUTTON WIDGETS=====

```

btn_login = Button(Form, text="Login", width=45, command=Login)
btn_login.grid(pady=25, row=3, columnspan=2)
btn_login.bind('<Return>', Login)

```

```

def HomeWindow():
    global Home
    root.withdraw()
    Home = Toplevel()
    Home.title("Python: Simple Login Application")
    width = 600
    height = 500
    screen_width = root.winfo_screenwidth()
    screen_height = root.winfo_screenheight()
    x = (screen_width/2) - (width/2)

```

```
y = (screen_height/2) - (height/2)
```

```
root.resizable(0, 0)
```

```
Home.geometry("%dx%d+%d+%d" % (width, height, x, y))
```

```
lbl_home = Label(Home, text="Successfully Login!", font=('times new roman', 20)).pack()
```

```
btn_back = Button(Home, text='Back', command=Back).pack(pady=20, fill=X)
```

```
def Back():
```

```
    Home.destroy()
```

```
    root.deiconify()
```