

```

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()