```
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()
```