**Practical no. 1**

**Aim**: Design User Login application using swing components

**Code:**

import javax.swing.\*;

import java.awt.event.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

public class UserLoginForm{

// declaration of components

JFrame mainFrame;

JLabel heading;

JLabel usernameLabel;

JLabel passwordLabel;

JTextField usernameField;

JPasswordField passwordField;

JButton loginButton;

JLabel statusBar;

// creating constructor coz it is a good practice

UserLoginForm(){

// initialization

mainFrame = new JFrame("User login form");

heading = new JLabel("USER LOGIN FORM");

usernameLabel = new JLabel("Username: ");

passwordLabel = new JLabel("Password: ");

usernameField = new JTextField("Username");

passwordField = new JPasswordField("");

loginButton = new JButton("Login");

statusBar = new JLabel("Status.. ");

// setting bounds for each coz using layout as "null"

heading.setBounds(80,10,150,30);

usernameLabel.setBounds(50,50,100,20);

passwordLabel.setBounds(50,90,100,20);

usernameField.setBounds(120,50,100,25);

passwordField.setBounds(120,90,100,25);

loginButton.setBounds(50,130,170,30);

statusBar.setBounds(70,170,150,30);

mainFrame.add(heading);

mainFrame.add(usernameLabel);

mainFrame.add(passwordLabel);

mainFrame.add(usernameField);

mainFrame.add(passwordField);

mainFrame.add(loginButton);

mainFrame.add(statusBar);

// imp things to be added before anything

// frame properties

mainFrame.setSize(300,250);

mainFrame.setLayout(null);

mainFrame.setVisible(true);

// if frame closes then terminate the program

mainFrame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

// adding actionlistener for loginButton

loginButton.addActionListener(new ActionListener(){

public void actionPerformed(ActionEvent e){

performLogin();

}

});

}

// method to be perform after login button click

public void performLogin(){

String username = usernameField.getText();

char[] passwordChar = passwordField.getPassword();

String password = new String(passwordChar);

if (username.equals("Jayesh") && password.equals("123")){

statusBar.setText("User login successful :)");

} else {

statusBar.setText("User login failed :(");

}

}

// main method or entry point

public static void main(String[] args){

// instance of a class

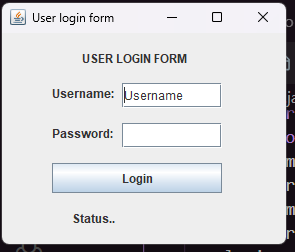
new UserLoginForm();

}

}

**Output:**

How application looks like :



After successful login: After login failed:

