LAB PROGRAM 3

Create a SIGN Up activity with Username and Password. Validation of password should happen based on the following rules:
☐ Password should contain uppercase and lowercase letters.
☐ Password should contain letters and numbers.
☐ Password should contain special characters.
☐ Minimum length of the password (the default value is 8).

On successful **SIGN UP** proceed to the next Login activity. Here the user should **SIGN IN** using the Username and Password created during signup activity. If the Username and Password are matched then navigate to the next activity which displays a message saying "Successful Login" or else display a toast message saying "Login Failed". The user is given only two attempts and after that display a toast message saying "Failed Login Attempts" and disable the SIGN IN button. Use Bundle to transfer information from one activity to another.

Step 1 UI Interface

1.Delete Hello World

2.Insert 3 Textview with the following attributes

Text: SIGNUP ACTIVITY	Text:UserName	Text:Password
Alignment:center Size 24 colour	Alignment:center Size 20 colour	Alignment:center Size 20 colour

3.Common-Text-PlainText

Text: Id: txt_username	Text: Id:txt_password

4.Button—Text: SignUp

        Id: btn_signup

APPLY CONSTRAINTS TO ALL THE OBJECTS FOR PROPER PLACEMENT

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For Login Screen UI

App (Right Click)—New – Activity – Empty Activity

Name: loginactivity   --- Finish

Go to code to signup copy the contents switch to code of loginactivity of xml paste

Change the following:

1.Text: LOGIN ACTIVITY

2.Change the plaintext view id of username : login_username

                         Password: login_password

3.Button : Text: Sign in , Id: btn_login

JAVA Code for Signup Activity

Java reference for the 3 objects in xml:

```java
public class MainActivity extends AppCompatActivity implements
View.OnClickListener {
    EditText Signup_Username,Signup_Password;
    Button btnSignup;
    String regularExpression="^(?=.*[A-Z])(?=.*[a-
z])(?=.*[@$!])[A-Za-z\\d@$!]{8,}$";


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        Signup_Username=(EditText)
findViewById(R.id.txt_username);
        Signup_Password=(EditText)
findViewById(R.id.txt_password);
        btnSignup=(Button) findViewById(R.id.btn_signup);
        btnSignup.setOnClickListener(this);

    }

    @Override
    public void onClick(View v) {
        String username=Signup_Username.getText().toString();
        String password=Signup_Password.getText().toString();

        if(validatePassword(password)){
            Toast.makeText(getBaseContext(),"Valid
Password",Toast.LENGTH_LONG).show();
            Bundle bundle=new Bundle();
            bundle.putString("user",username);
```

```
            bundle.putString("pwd",password);
             Intent it= new Intent(this,loginactivity.class);
             it.putExtra("data",bundle);
             startActivity(it);
        }else
        {
             Toast.makeText(getBaseContext(),"Invalid
Password",Toast.LENGTH_LONG).show();
        }


    }

    private boolean validatePassword(String password) {
        Pattern pattern=Pattern.compile(regularExpression);
        Matcher matcher=pattern.matcher(password);
        return matcher.matches();
    }
}
```

LOGIN ACTIVITY JAVA CODE

```
public class loginactivity extends AppCompatActivity implements
View.OnClickListener {
    EditText LoginUsername,LoginPassword;
    Button btnLogin;
    String user,pass;
    int count=0;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_loginactivity);
        LoginUsername=(EditText)
findViewById(R.id.login_username);
        LoginPassword=(EditText)
findViewById(R.id.login_password);
        btnLogin=(Button) findViewById(R.id.btn_login);
        btnLogin.setOnClickListener(this);
        Bundle bundle=getIntent().getBundleExtra("data");
        user=bundle.getString("user");
        pass=bundle.getString("pwd");

    }

    @Override
    public void onClick(View view) {
        String user1=LoginUsername.getText().toString();
        String pass1=LoginPassword.getText().toString();

        if(user.equals(user1) && pass.equals(pass1))
```

```java
        {
            Toast.makeText(this,"Login
Successful",Toast.LENGTH_LONG).show();
        }else
        {
            count++;
            if(count==3){
                btnLogin.setEnabled(false);
                Toast.makeText(this,"Failed Login
Attempts",Toast.LENGTH_LONG).show();
            }
            else
            {
                Toast.makeText(this,"Login Failed"
+count,Toast.LENGTH_LONG).show();
            }
        }

    }
}
```