Activity_Main.XML

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:app="http://schemas.android.com/apk/res-auto"
  xmlns:tools="http://schemas.android.com/tools"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:orientation="vertical"
  tools:context=".Signup">
  <TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="95dp"
    android:layout_marginEnd="90dp"
    android:text="Signup Activity"
    android:textColor="@color/black"
    android:textSize="30dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="1.0"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.092" />
  <EditText
    android:id="@+id/username"
    android:layout_width="398dp"
    android:layout_height="100dp"
    android:hint="Username:"
    android:textAlignment="textStart"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.461"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.313" />
  <EditText
    android:id="@+id/password"
    android:layout_width="389dp"
```

```
android:layout_height="85dp"
  android:hint="Password:"
  app:layout_constraintBottom_toBottomOf="parent"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintHorizontal_bias="0.272"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toTopOf="parent" />
<Button
  android:id="@+id/signup"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_marginLeft="150dp"
  android:text="Sign Up"
  app:layout_constraintBottom_toBottomOf="parent"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintHorizontal_bias="0.116"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toTopOf="parent"
  app:layout_constraintVertical_bias="0.651" />
```

</androidx.constraintlayout.widget.ConstraintLayout>

Activity_Signin.XML

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:app="http://schemas.android.com/apk/res-auto"
   xmlns:tools="http://schemas.android.com/tools"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   android:orientation="vertical"
   tools:context=".Signin">

<TextView
   android:layout_width="match_parent"
   android:layout_height="wrap_content"
   android:layout_marginStart="95dp"
   android:layout_marginEnd="90dp"
   android:text="Login Activity"</pre>
```

```
android:textColor="@color/black"
  android:textSize="30dp"
  app:layout_constraintBottom_toBottomOf="parent"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintHorizontal_bias="1.0"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toTopOf="parent"
  app:layout_constraintVertical_bias="0.121" />
<EditText
  android:id="@+id/username"
  android:layout_width="match_parent"
  android:layout_height="89dp"
  android:hint="Username: "
  app:layout_constraintBottom_toBottomOf="parent"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintHorizontal_bias="1.0"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toTopOf="parent"
  app:layout_constraintVertical_bias="0.272" />
<EditText
  android:id="@+id/password"
  android:layout_width="match_parent"
  android:layout_height="102dp"
  android:hint="Password:"
  app:layout_constraintBottom_toBottomOf="parent"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintHorizontal_bias="0.0"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toTopOf="parent"
  app:layout_constraintVertical_bias="0.481" />
<Button
  android:id="@+id/login"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_marginLeft="150dp"
  android:text="Login"
  app:layout_constraintBottom_toBottomOf="parent"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintHorizontal_bias="0.021"
  app:layout_constraintStart_toStartOf="parent"
```

```
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.641" />
```

</androidx.constraintlayout.widget.ConstraintLayout>

Activity_Welcome.XML

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:app="http://schemas.android.com/apk/res-auto"
  xmlns:tools="http://schemas.android.com/tools"
  android:layout_width="match_parent"
  android:layout height="match parent"
  tools:context=".Welcome">
  <TextView
    android:id="@+id/textView"
    android:layout_width="182dp"
    android:layout_height="165dp"
    android:text="WELCOME TO HOME PAGE"
    android:textAlignment="center"
    android:textColor="#D32F2F"
    android:textSize="34sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout constraintHorizontal bias="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout constraintTop toTopOf="parent"
    app:layout_constraintVertical_bias="0.439" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Signup.JAVA

```
package com.example.signup;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.Button;
import android.widget.EditText;
import android.content.Intent;
import android.view.View;
import android.widget.Toast;
import java.util.regex.Pattern;
public class Signup extends AppCompatActivity {
  EditText username, pwd;
  Button signup;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    username = (EditText) findViewById(R.id.username);
    pwd = (EditText) findViewById(R.id.password);
    signup = (Button) findViewById(R.id.signup);
    signup.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         String email = username.getText().toString();
         String userpwd = pwd.getText().toString();
         if (email.matches("")) {
            Toast.makeText(Signup.this, "Username cannot be empty",
Toast.LENGTH LONG).show();
            return;
         if (!isvalidPassword(userpwd)) {
            Toast.makeText(Signup.this, "Invalid Password",
Toast. LENGTH_LONG). show();
            return;
         Intent intent = new Intent(Signup.this, Signin.class);
         intent.putExtra("email", email);
         intent.putExtra("userpwd", userpwd);
         startActivity(intent);
```

```
});
  Pattern lowercase = Pattern.compile("^.*[a-z].*$");
  Pattern uppercase = Pattern.compile("^.*[A-Z].*$");
  Pattern number = Pattern.compile("^.*[0-9].*$");
  Pattern special = Pattern.compile("^*.*[@#$\%^&*(){},.;/].*$");
  private boolean isvalidPassword(String userpwd) {
     if (userpwd.length() < 8) {
     return false;
    if(!lowercase.matcher(userpwd).matches()){
      return false;
    if(!uppercase.matcher(userpwd).matches()){
      return false;
    if(!number.matcher(userpwd).matches()){
      return false;
    if(!special.matcher(userpwd).matches()){
      return false;
    }
     return true;
  }
Signin.JAVA
package com.example.signup;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.content.Intent;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
public class Signin extends AppCompatActivity {
 EditText eusername, epwd;
  Button login;
  int count=0;
  @Override
```

```
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_signin);
    eusername = (EditText) findViewById(R.id.username);
    epwd = (EditText)findViewById(R.id.password);
    login = (Button)findViewById(R.id.login);
    String regemail=getIntent().getStringExtra("email");
    String regpwd=getIntent().getStringExtra("userpwd");
    login.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         String newemail=eusername.getText().toString();
         String newpwd=epwd.getText().toString();
         if(regemail.equals(newemail) && regpwd.equals(newpwd)){
            Toast.makeText(Signin.this, "Login Successful",
Toast.LENGTH_LONG).show();
           Intent intent=new Intent(Signin.this, Welcome.class);
           startActivity(intent);
           eusername.setText("");
           epwd.setText("");
         }
         else{
           count++;
           Toast.makeText(Signin.this, "Login Failed "+count,
Toast.LENGTH_LONG).show();
           if(count==3)
            {
              login.setEnabled(false);
              Toast.makeText(Signin.this, "Login Failed "+count,
Toast. LENGTH_LONG). show();
        });
}
```

Welcome.JAVA

```
package com.example.signup;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
public class Welcome extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_welcome);
    }
}
```