

Q1. Create an android application for SMS activity.

```
<uses-permission android:name="android.permission.SEND_SMS"/>
```

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<RelativeLayout xmlns:android=http://schemas.android.com/apk/res/android
```

```
    xmlns:tools=http://schemas.android.com/tools
```

```
    Android:layout_width="match_parent"
```

```
    Android:layout_height="match_parent"
```

```
    Android:padding="16dp"
```

```
    Tools:context=".MainActivity">
```

```
<EditText
```

```
    Android:id="@+id/editTextPhoneNumber"
```

```
    Android:layout_width="match_parent"
```

```
    Android:layout_height="wrap_content"
```

```
    Android:hint="Phone Number"/>
```

```
<EditText
```

```
    Android:id="@+id/editTextMessage"
```

```
    Android:layout_width="match_parent"
```

```
    Android:layout_height="wrap_content"
```

```
    Android:layout_below="@id/editTextPhoneNumber"
```

```
    Android:layout_marginTop="16dp"
```

```
    Android:hint="Message"/>
```

```
<Button
```

```
    Android:id="@+id/buttonSend"
```

```
    Android:layout_width="wrap_content"
```

```
Android:layout_height="wrap_content"
Android:layout_below="@id/editTextMessage"
Android:layout_marginTop="16dp"
Android:text="Send"/>
```

```
</RelativeLayout>
```

Main.java

```
Public class MainActivity extends AppCompatActivity {
```

```
    Private EditText editTextPhoneNumber;
```

```
    Private EditText editTextMessage;
```

```
    @Override
```

```
    Protected void onCreate(Bundle savedInstanceState) {
```

```
        Super.onCreate(savedInstanceState);
```

```
        setContentView(R.layout.activity_main);
```

```
        editTextPhoneNumber = findViewById(R.id.editTextPhoneNumber);
```

```
        editTextMessage = findViewById(R.id.editTextMessage);
```

```
        Button buttonSend = findViewById(R.id.buttonSend);
```

```
        buttonSend.setOnClickListener(new View.OnClickListener() {
```

```
            @Override
```

```
            Public void onClick(View v) {
```

```
                sendSMS();
```

```
            }
```

```
        });
```

```
    }
```

```

Private void sendSMS() {
    String phoneNumber = editTextPhoneNumber.getText().toString();
    String message = editTextMessage.getText().toString();

    If (ContextCompat.checkSelfPermission(this, Manifest.permission.SEND_SMS)
        != PackageManager.PERMISSION_GRANTED) {
        ActivityCompat.requestPermissions(this, new
String[]{Manifest.permission.SEND_SMS}, 1);
    } else {
        SmsManager smsManager = SmsManager.getDefault();
        smsManager.sendTextMessage(phoneNumber, null, message, null, null);
        Toast.makeText(this, "SMS Sent!", Toast.LENGTH_SHORT).show();
    }
}

```

```

@Override

Public void onRequestPermissionsResult(int requestCode, @NonNull String[]
permissions, @NonNull int[] grantResults) {
    Super.onRequestPermissionsResult(requestCode, permissions, grantResults);

    If (requestCode == 1 && grantResults.length > 0 && grantResults[0] ==
PackageManager.PERMISSION_GRANTED) {
        sendSMS();
    } else {
        Toast.makeText(this, "Permission denied to send SMS",
Toast.LENGTH_SHORT).show();
    }
}

```

```
}
```

Q2. Create an Android application, which show Login Form. After clicking LOGIN button display the “Login Successful...” message if username and Password is same else display “Invalid Login” message in Toast Control.

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<RelativeLayout xmlns:android=http://schemas.android.com/apk/res/android
```

```
    xmlns:tools=http://schemas.android.com/tools
```

```
    Android:layout_width="match_parent"
```

```
    Android:layout_height="match_parent"
```

```
    Tools:context=".MainActivity">
```

```
<EditText
```

```
    Android:id="@+id/editTextUsername"
```

```
    Android:layout_width="match_parent"
```

```
    Android:layout_height="wrap_content"
```

```
    Android:hint="Username"
```

```
    Android:layout_margin="16dp"/>
```

```
<EditText
```

```
    Android:id="@+id/editTextPassword"
```

```
    Android:layout_width="match_parent"
```

```
    Android:layout_height="wrap_content"
```

```
    Android:hint="Password"
```

```
    Android:inputType="textPassword"
```

```
    Android:layout_below="@id/editTextUsername"
```

```
    Android:layout_margin="16dp"/>
```

```
<Button
    Android:id="@+id/buttonLogin"
    Android:layout_width="wrap_content"
    Android:layout_height="wrap_content"
    Android:text="LOGIN"
    Android:layout_below="@id/editTextPassword"
    Android:layout_centerHorizontal="true"
    Android:layout_marginTop="24dp"/>
```

```
</RelativeLayout>
```

Main.java

```
Import android.os.Bundle;
Import android.view.View;
Import android.widget.Button;
Import android.widget.EditText;
Import android.widget.Toast;

Import androidx.appcompat.app.AppCompatActivity;

Public class MainActivity extends AppCompatActivity {

    Private EditText editTextUsername, editTextPassword;
    Private Button buttonLogin;

    @Override
```

```

Protected void onCreate(Bundle savedInstanceState) {

    Super.onCreate(savedInstanceState);

    setContentView(R.layout.activity_main);


    editTextUsername = findViewById(R.id.editTextUsername);
    editTextPassword = findViewById(R.id.editTextPassword);
    buttonLogin = findViewById(R.id.buttonLogin);


    buttonLogin.setOnClickListener(new View.OnClickListener() {

        @Override
        Public void onClick(View v) {

            Login();

        }

    });
}

Private void login() {

    String username = editTextUsername.getText().toString().trim();
    String password = editTextPassword.getText().toString().trim();


    // Check if username and password are the same
    If (username.equals(password)) {

        // Login successful

        Toast.makeText(this, "Login Successful...", Toast.LENGTH_SHORT).show();

    } else {

        // Invalid login

        Toast.makeText(this, "Invalid Login", Toast.LENGTH_SHORT).show();
    }
}

```

}

}

}