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();

}

}

}