Create an android application that demonstrate alert dialog box. **(10M)**

**XML File:**

<?*xml version*="1.0" *encoding*="utf-8"?>  
  
<LinearLayout *xmlns:android*="http://schemas.android.com/apk/res/android"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent"  
 *android:orientation*="vertical"  
 *android:padding*="16dp">  
  
 <Button  
 *android:id*="@+id/show\_alert\_btn"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="wrap\_content"  
 *android:text*="Show Alert Dialog" />  
  
</LinearLayout>

**Java File:**

*package* com.example.dilogbox;  
  
*import* android.app.AlertDialog;  
*import* android.content.*DialogInterface*;  
*import* android.os.Bundle;  
*import* android.view.View;  
*import* android.widget.Button;  
  
*import* androidx.appcompat.app.AppCompatActivity;  
  
*public class* MainActivity *extends* AppCompatActivity {  
  
 *private* Button showAlertBtn;  
  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
  
 showAlertBtn = (Button) findViewById(R.id.***show\_alert\_btn***);  
 showAlertBtn.setOnClickListener(*new* View.OnClickListener() {  
 @Override  
 *public void* onClick(View view) {  
 *// create a new alert dialog* AlertDialog.Builder builder = *new* AlertDialog.Builder(MainActivity.*this*);  
 builder.setTitle("Files Required");  
 builder.setMessage("Please select the files you want to use.");  
 builder.setPositiveButton("OK", *new DialogInterface*.OnClickListener() {  
 @Override  
 *public void* onClick(*DialogInterface* dialogInterface, *int* i) {  
 *// do something when the "OK" button is clicked* }  
 });  
 builder.setNegativeButton("Cancel", *new DialogInterface*.OnClickListener() {  
 @Override  
 *public void* onClick(*DialogInterface* dialogInterface, *int* i) {  
 *// do something when the "Cancel" button is clicked* }  
 });  
 *// display the alert dialog* AlertDialog dialog = builder.create();  
 dialog.show();  
 }  
 });  
 }  
}

Create an android application that produce Notification. **(20M)**

**OR**

Create an android application to accept two numbers and find power

And Average. display the result on second activity using context menu. **(20M)**

**Activity.xml**

<?*xml version*="1.0" *encoding*="utf-8"?>  
<LinearLayout *xmlns:android*="http://schemas.android.com/apk/res/android"  
 *android:id*="@+id/main\_layout"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent"  
 *android:orientation*="vertical">  
  
 <EditText  
 *android:id*="@+id/editText1"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="wrap\_content"  
 *android:hint*="Enter first number"/>  
  
 <EditText  
 *android:id*="@+id/editText2"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="wrap\_content"  
 *android:hint*="Enter second number"  
 *android:minHeight*="48dp" />  
  
 <Button  
 *android:id*="@+id/button"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:text*="Calculate"/>  
  
</LinearLayout>

**MainActivity.java**

*package* com.example.poweraverage;  
  
*import* android.content.Intent;  
*import* android.os.Bundle;  
*import* android.view.*ContextMenu*;  
*import* android.view.*MenuItem*;  
*import* android.view.View;  
*import* android.widget.Button;  
*import* android.widget.EditText;  
  
*import* androidx.appcompat.app.AppCompatActivity;  
  
*public class* MainActivity *extends* AppCompatActivity {  
  
 *private* EditText editText1, editText2;  
 *private* Button button;  
  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
  
 editText1 = findViewById(R.id.***editText1***);  
 editText2 = findViewById(R.id.***editText2***);  
 button = findViewById(R.id.***button***);  
  
 button.setOnClickListener(*new* View.OnClickListener() {  
 @Override  
 *public void* onClick(View view) {  
 *double* num1 = Double.*parseDouble*(editText1.getText().toString());  
 *double* num2 = Double.*parseDouble*(editText2.getText().toString());  
  
 *double* power = Math.*pow*(num1, num2);  
 *double* average = (num1 + num2) / 2;  
  
 Intent intent = *new* Intent(MainActivity.*this*, MainActivity2.*class*);  
 intent.putExtra("power", power);  
 intent.putExtra("average", average);  
  
 registerForContextMenu(view);  
 openContextMenu(view);  
 }  
 });  
 }  
  
 @Override  
 *public void* onCreateContextMenu(*ContextMenu* menu, View v, *ContextMenu*.*ContextMenuInfo* menuInfo) {  
 *super*.onCreateContextMenu(menu, v, menuInfo);  
 getMenuInflater().inflate(R.menu.***menu\_context***, menu);  
 }  
  
 @Override  
 *public boolean* onContextItemSelected(*MenuItem* item) {  
 *if* (item.getItemId() == R.id.***result\_item***) {  
 Intent intent = getIntent();  
 intent.setClass(MainActivity.*this*, MainActivity2.*class*);  
 startActivity(intent);  
 *return true*;  
 }  
 *return super*.onContextItemSelected(item);  
 }  
}

**Activity\_main2.xml**

<?*xml version*="1.0" *encoding*="utf-8"?>  
<LinearLayout *xmlns:android*="http://schemas.android.com/apk/res/android"  
 *android:id*="@+id/main\_layout"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent"  
 *android:orientation*="vertical">  
  
 <TextView *xmlns:android*="http://schemas.android.com/apk/res/android"  
 *android:id*="@+id/resultTextView"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="wrap\_content"  
 *android:textAppearance*="?android:attr/textAppearanceLarge"/>  
  
</LinearLayout>

**MainActivity2.java**

*package* com.example.poweraverage;  
  
*import* android.content.Intent;  
*import* android.os.Bundle;  
*import* android.widget.TextView;  
  
*import* androidx.appcompat.app.AppCompatActivity;  
  
*public class* MainActivity2 *extends* AppCompatActivity {  
  
 *private* TextView resultTextView;  
  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main2***);  
  
 resultTextView = findViewById(R.id.***resultTextView***);  
  
 Intent intent = getIntent();  
 *double* power = intent.getDoubleExtra("power", 0);  
 *double* average = intent.getDoubleExtra("average", 0);  
  
 String resultText = "Power: " + power + "\n" + "Average: " + average;  
 resultTextView.setText(resultText);  
 }  
}

**Menu\_context.xml** (To Right Click on Res tab>then New >then Android Recourse File Click on that >select values>then select Menu from dropdown list>enter name for your Menu file

e.g.” Menu\_context” >and press OK your “menu\_conetxt .xml” file will generate in res tab then paste this code in This file)

<?*xml version*="1.0" *encoding*="utf-8"?>  
<menu *xmlns:android*="http://schemas.android.com/apk/res/android">  
 <item  
 *android:id*="@+id/result\_item"  
 *android:title*="To Get Power and Average Touch Here"/>  
</menu>

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Create an android application that on/off the bulb using **toggle button (10M)**

For this program you need to add togglebulb image in drawable folder first

Step to add image in drawable folder:

1.right click on drawable select new

2.go to Vector assest

3.click on Clip art

4.and search toggle\_on/toggle\_off

5.add both images one by one

6.then rename it toggle\_on and toggle\_off which same in MainActivity.java

**Activity.xml**

<?*xml version*="1.0" *encoding*="utf-8"?>  
<RelativeLayout  
 *xmlns:android*="http://schemas.android.com/apk/res/android"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent">  
  
 <ImageView  
 *android:id*="@+id/bulbImageView"  
 *android:layout\_width*="200dp"  
 *android:layout\_height*="200dp"  
 *android:src*="@drawable/toggle\_off"  
 *android:layout\_centerInParent*="true"/>  
  
 <ToggleButton  
 *android:id*="@+id/bulbToggleButton"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:textOn*="ON"  
 *android:textOff*="OFF"  
 *android:checked*="false"  
 *android:layout\_below*="@+id/bulbImageView"  
 *android:layout\_centerHorizontal*="true"/>  
  
</RelativeLayout>

**MainActivity.java**

*package* com.example.togglebulb;  
  
*import* android.os.Bundle;  
 *import* android.widget.CompoundButton;  
 *import* android.widget.ImageView;  
 *import* android.widget.ToggleButton;  
  
 *import* androidx.appcompat.app.AppCompatActivity;  
  
*public class* MainActivity *extends* AppCompatActivity {  
  
 *private* ImageView bulbImageView;  
 *private* ToggleButton bulbToggleButton;  
  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
  
 bulbImageView = findViewById(R.id.***bulbImageView***);  
 bulbToggleButton = findViewById(R.id.***bulbToggleButton***);  
  
 bulbToggleButton.setOnCheckedChangeListener(*new* CompoundButton.OnCheckedChangeListener() {  
 @Override  
 *public void* onCheckedChanged(CompoundButton compoundButton, *boolean* isChecked) {  
 *if* (isChecked) {  
 bulbImageView.setImageResource(R.drawable.***toggle\_on***);   
 } *else* {  
 bulbImageView.setImageResource(R.drawable.***toggle\_off***);  
 }  
 }  
 });  
 }  
}

Screen(membership form) **(20M)**

**Or**

Create an android application to send SMS message, after sending message display the entered text on next activity **(20M)**

**activity\_main.xml:**

<?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:paddingBottom="@dimen/activity\_vertical\_margin"

android:paddingLeft="@dimen/activity\_horizontal\_margin"

android:paddingRight="@dimen/activity\_horizontal\_margin"

android:paddingTop="@dimen/activity\_vertical\_margin"

tools:context="MainActivity">

<TextView

android:id="@+id/textView1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Sending SMS Example"

android:layout\_alignParentTop="true"

android:layout\_centerHorizontal="true"

android:textSize="30dp" />

<TextView

android:id="@+id/textView2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="SMS APP "

android:textColor="#ff87ff09"

android:textSize="30dp"

android:layout\_below="@+id/textView1"

android:layout\_alignRight="@+id/imageButton"

android:layout\_alignEnd="@+id/imageButton" />

<EditText

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/editText"

android:hint="Enter Phone Number"

android:phoneNumber="true"

android:textColorHint="@color/abc\_primary\_text\_material\_dark"

android:layout\_below="@+id/imageButton"

android:layout\_centerHorizontal="true" />

<EditText

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/editText2"

android:layout\_below="@+id/editText"

android:layout\_alignLeft="@+id/editText"

android:layout\_alignStart="@+id/editText"

android:textColorHint="@color/abc\_primary\_text\_material\_dark"

android:layout\_alignRight="@+id/imageButton"

android:layout\_alignEnd="@+id/imageButton"

android:hint="Enter SMS" />

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Send Sms"

android:id="@+id/btnSendSMS"

android:layout\_below="@+id/editText2"

android:layout\_centerHorizontal="true"

android:layout\_marginTop="48dp" />

</RelativeLayout>

**MainActivity.java**

import android.Manifest;

import android.content.pm.PackageManager;

import android.os.Bundle;

import android.app.Activity;

import android.support.v4.app.ActivityCompat;

import android.support.v4.content.ContextCompat;

import android.telephony.SmsManager;

import android.util.Log;

import android.view.Menu;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

public class MainActivity extends Activity {

private static final int MY\_PERMISSIONS\_REQUEST\_SEND\_SMS =0 ;

Button sendBtn;

EditText txtphoneNo;

EditText txtMessage;

String phoneNo;

String message;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

sendBtn = (Button) findViewById(R.id.btnSendSMS);

txtphoneNo = (EditText) findViewById(R.id.editText);

txtMessage = (EditText) findViewById(R.id.editText2);

sendBtn.setOnClickListener(new View.OnClickListener() {

public void onClick(View view) {

sendSMSMessage();

}

});

}

protected void sendSMSMessage() {

phoneNo = txtphoneNo.getText().toString();

message = txtMessage.getText().toString();

if (ContextCompat.checkSelfPermission(this,

Manifest.permission.SEND\_SMS)

!= PackageManager.PERMISSION\_GRANTED) {

if (ActivityCompat.shouldShowRequestPermissionRationale(this,

Manifest.permission.SEND\_SMS)) {

} else {

ActivityCompat.requestPermissions(this,

new String[]{Manifest.permission.SEND\_SMS},

MY\_PERMISSIONS\_REQUEST\_SEND\_SMS);

}

}

}

@Override

public void onRequestPermissionsResult(int requestCode,String permissions[], int[] grantResults) {

switch (requestCode) {

case MY\_PERMISSIONS\_REQUEST\_SEND\_SMS: {

if (grantResults.length > 0

&& grantResults[0] == PackageManager.PERMISSION\_GRANTED) {

SmsManager smsManager = SmsManager.getDefault();

smsManager.sendTextMessage(phoneNo, null, message, null, null);

Toast.makeText(getApplicationContext(), "SMS sent.",

Toast.LENGTH\_LONG).show();

} else {

Toast.makeText(getApplicationContext(),

"SMS faild, please try again.", Toast.LENGTH\_LONG).show();

return;

}

}

}

}

}

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

<manifest xmlns:android="http://schemas.android.com/apk/res/android"

package="com.example.smsapp" >

<uses-permission android:name="android.permission.SEND\_SMS" /> //This is important

<application

android:allowBackup="true"

android:icon="@drawable/ic\_launcher"

android:label="@string/app\_name"

android:theme="@style/AppTheme" >

<activity

android:name="com.example.smsapp.MainActivity" android:label="@string/app\_name" >

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

</intent-filter>

</activity>

</application>

</manifest>

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Create an android application to change an image on the screen. **(10M)**

Demonstrate option menu ,context menu and popup menu in android.**(20M)**

OR

Demonstrate Array Adapter using List View to display list of Country.**(20M)**

**……………………………………………………………………………………………………….**

Create a simple application which shows Life Cycle of Activity.

{Use log}. **(10M)**

Create the following layout which is changing android spinner text size with styles. **(20M)**

OR

Create an android application to send email.**(20M)**

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Design the following -add border to an Android Layout.**(10M)**

Create an android application with Login Screen On Successful login, gives message to next Activity (without using database). **(20M)**

**OR**

Create First Activity to accept information like Employee First Name, Middle Name, LastName, Salary, Address, Email ID and display all information on Second Activity when user click on Submit button**.(20M)**