Slips 5

**Q.1)** Java Android Program to Demonstrate Alert Dialog Box.

Ans.

<?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">

<Button android:id="@+id/buttonShowDialog" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Show Dialog" android:layout\_centerInParent="true" android:padding="16dp" />

</RelativeLayout>

**MainActivity.java- package** com.example.myapplication;

import android.content.DialogInterface; import android.os.Bundle;

import android.view.View; import android.widget.Button; import androidx.appcompat.app.AlertDialog; import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

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

Button buttonShowDialog = findViewById(R.id.buttonShowDialog);

buttonShowDialog.setOnClickListener(new View.OnClickListener() { @Override

public void onClick(View v) { showAlertDialog();

}

});

}

private void showAlertDialog() {

AlertDialog.Builder builder = new AlertDialog.Builder(this); builder.setTitle("Alert Dialog Example")

.setMessage("This is a sample Alert Dialog!")

.setPositiveButton("OK", new DialogInterface.OnClickListener() {

@Override

public void onClick(DialogInterface dialog, int which)

{

// Do something when OK button is clicked

}

})

.setNegativeButton("Cancel", new

DialogInterface.OnClickListener() {

@Override

public void onClick(DialogInterface dialog, int which)

{

// Do something when Cancel button is clicked

}

})

.setNeutralButton("Neutral", new

DialogInterface.OnClickListener() {

@Override

public void onClick(DialogInterface dialog, int which)

{

// Do something when Neutral button is clicked

}

})

.show();

}

}

**Q.2)** Create an Android application which will ask the user to input his / her name. A message should display the two items concatenated in a label. Change the format of the label using radio buttons and check boxes for selection. The user can make the label text bold, underlined or italic as well as change its color. Also include buttons to display the message in the label, clear the text boxes as well as label. Finally exit.

Ans.

<?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/editTextName" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:layout\_margin="16dp" android:hint="Enter your name" />

<Button android:id="@+id/buttonDisplayMessage" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Display Message" android:layout\_below="@id/editTextName" android:layout\_marginTop="16dp" android:layout\_marginStart="16dp" android:onClick="displayMessage" />

<Button android:id="@+id/buttonClear" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Clear"

android:layout\_toEndOf="@id/buttonDisplayMessage" android:layout\_below="@id/editTextName" android:layout\_marginTop="16dp" android:layout\_marginStart="16dp" android:onClick="clearFields" />

<TextView android:id="@+id/textViewMessage" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_below="@id/buttonDisplayMessage" android:layout\_marginTop="16dp" android:layout\_marginStart="16dp"

android:text="" android:textSize="18sp" />

<RadioGroup

android:id="@+id/radioGroupFormat" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_below="@id/textViewMessage" android:layout\_marginTop="16dp" android:layout\_marginStart="16dp" android:orientation="horizontal">

<RadioButton android:id="@+id/radioButtonBold" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Bold" />

<RadioButton android:id="@+id/radioButtonUnderline" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Underline" />

<RadioButton android:id="@+id/radioButtonItalic" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content"

android:text="Italic" />

</RadioGroup>

<CheckBox android:id="@+id/checkBoxColor" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Change Color" android:layout\_below="@id/textViewMessage" android:layout\_toEndOf="@id/radioGroupFormat" android:layout\_marginTop="16dp" android:layout\_marginStart="16dp" />

<Button

android:id="@+id/buttonApply" android:layout\_width="120dp" android:layout\_height="59dp" android:layout\_below="@id/textViewMessage" android:layout\_marginStart="-110dp" android:layout\_marginTop="81dp" android:layout\_toEndOf="@id/checkBoxColor" android:onClick="applyChanges" android:text="Apply" />

</RelativeLayout>

**MainActivity.java- package** com.example.myapplication;

import android.graphics.Color;

import android.graphics.Typeface; import android.os.Bundle; import android.view.View; import android.widget.CheckBox; import android.widget.EditText; import android.widget.RadioButton; import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity { private EditText editTextName; private TextView textViewMessage;

private RadioButton radioButtonBold, radioButtonUnderline, radioButtonItalic;

private CheckBox checkBoxColor;

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

editTextName = findViewById(R.id.editTextName); textViewMessage = findViewById(R.id.textViewMessage); radioButtonBold = findViewById(R.id.radioButtonBold); radioButtonUnderline = findViewById(R.id.radioButtonUnderline);

radioButtonItalic = findViewById(R.id.radioButtonItalic); checkBoxColor = findViewById(R.id.checkBoxColor);

}

public void displayMessage(View view) {

String name = editTextName.getText().toString().trim(); textViewMessage.setText(name);

}

public void clearFields(View view) { editTextName.setText(""); textViewMessage.setText(""); radioButtonBold.setChecked(false); radioButtonUnderline.setChecked(false); radioButtonItalic.setChecked(false); checkBoxColor.setChecked(false); textViewMessage.setTextColor(Color.BLACK); textViewMessage.setTypeface(null, Typeface.NORMAL); textViewMessage.setTypeface(null, Typeface.BOLD); textViewMessage.setTypeface(null, Typeface.ITALIC); textViewMessage.setTextColor(Color.GREEN);

}

public void applyChanges(View view) {

int style = 0;

if (radioButtonBold.isChecked()) { style |= android.graphics.Typeface.BOLD;

}

if (radioButtonUnderline.isChecked()) {

textViewMessage.setPaintFlags(textViewMessage.getPaintFlags() | android.graphics.Paint.UNDERLINE\_TEXT\_FLAG);

}

if (radioButtonItalic.isChecked()) { style |= android.graphics.Typeface.ITALIC;

}

textViewMessage.setTypeface(null, style);

if (checkBoxColor.isChecked()) {

textViewMessage.setTextColor(Color.RED); // Change color to RED (You can change as per requirement)

} else {

textViewMessage.setTextColor(Color.BLACK); // Reset color to BLACK

}

}

}