**B) Create an Android Application Which reads the person, greet message from one activity and display the Greet message on another activity on click of Button (Use Intent). [15 Marks]**

**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"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/edittext"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="106dp"  
 android:layout\_marginTop="44dp"  
 android:layout\_marginEnd="95dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 android:text="Enter your Message"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="166dp"  
 android:layout\_marginTop="34dp"  
 android:layout\_marginEnd="151dp"  
 android:layout\_marginBottom="560dp"  
 android:text="Submit"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/edittext"  
 app:layout\_constraintVertical\_bias="1.0" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**ActivityMain.java**

package com.example.myapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
public class MainActivity extends AppCompatActivity {  
  
 EditText editText;  
 Button button;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 editText=(EditText)findViewById(R.id.*edittext*);  
 button=(Button) findViewById(R.id.*button*);  
  
 button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 String str= editText.getText().toString();  
  
 Intent intent = new Intent(MainActivity.this, MainActivity2.class);  
 intent.putExtra("msg", str);  
 startActivity(intent);  
 }  
 });  
 }  
}

**Activity\_main2.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=".MainActivity2">  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="308dp"  
 android:layout\_height="57dp"  
 android:text="Output"  
 android:textSize="30sp"  
 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="0.066" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**secondActivity.java**

package com.example.myapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.widget.TextView;  
  
public class MainActivity2 extends AppCompatActivity {  
  
 TextView txt\_msgAnswer;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main2*);  
 txt\_msgAnswer=(TextView)findViewById(R.id.*textView*);  
  
 Intent intent = getIntent();  
  
 String str = intent.getStringExtra("msg");  
 txt\_msgAnswer.setText(str);  
 }  
}

**Q2. Create a Custom Listview in Android Application [30 Marks]**

**MainActivity.java**

package com.example.myapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Context;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.AdapterView;  
import android.widget.ArrayAdapter;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.ListView;  
import android.widget.Toast;  
  
import java.util.ArrayList;  
  
public class MainActivity extends AppCompatActivity {  
  
 private ArrayList<String> items;  
 private ArrayAdapter<String> itemsAdapter;  
 private ListView listView;  
 private Button button;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 listView=findViewById(R.id.*ListView*);  
 button=findViewById(R.id.*button*);  
  
 button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 additem(view);  
 }  
 });  
 items=new ArrayList<>();  
 itemsAdapter=new ArrayAdapter<>(this, android.R.layout.*simple\_list\_item\_1*, items);  
 listView.setAdapter(itemsAdapter);  
 setUpListViewListner();  
  
 }  
  
 private void setUpListViewListner() {  
 listView.setOnItemLongClickListener(new AdapterView.OnItemLongClickListener() {  
 @Override  
 public boolean onItemLongClick(AdapterView<?> adapterView, View view, int i, long l){  
  
 Context context = getApplicationContext();  
 Toast.*makeText*(context, "item removed", Toast.*LENGTH\_LONG*).show();  
  
 items.remove(i);  
 itemsAdapter.notifyDataSetChanged();  
 return true;  
 }  
 });  
 }  
  
 private void additem(View view) {  
 EditText input = findViewById(R.id.*editText*);  
 String itemText = input.getText().toString();  
  
 if(!(itemText.equals(""))){  
 itemsAdapter.add(itemText);  
 input.setText("");  
 }  
 else{  
 Toast.*makeText*(getApplicationContext(), "Please Enter Text", Toast.*LENGTH\_LONG*).show();  
 }  
 }  
}

**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"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/editText"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="11dp"  
 android:layout\_marginTop="5dp"  
 android:layout\_marginBottom="14dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 android:text="Name"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toStartOf="@+id/button"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/linearLayout" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginEnd="20dp"  
 android:layout\_marginBottom="16dp"  
 android:text="Button"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="1.0"  
 app:layout\_constraintStart\_toEndOf="@+id/editText"  
 app:layout\_constraintTop\_toBottomOf="@+id/linearLayout" />  
  
  
 <LinearLayout  
 android:id="@+id/linearLayout"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:orientation="vertical"  
 app:layout\_constraintBottom\_toTopOf="@+id/button"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent">  
  
 <ListView  
 android:id="@+id/ListView"  
 android:layout\_width="409dp"  
 android:layout\_height="665dp"  
 android:layout\_marginStart="1dp"  
 android:layout\_marginTop="1dp"  
 android:layout\_marginEnd="1dp"  
 android:layout\_marginBottom="1dp" />  
 </LinearLayout>  
</androidx.constraintlayout.widget.ConstraintLayout>