Date:21/10/2024

### **APPLICATION USING INTENT**

# **AIM**

Implement intend to navigate between multiple activities

### activity\_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
 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"
  android:orientation="vertical"
  android:textAlignment="textStart"
  tools:context=".MainActivity">
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
    <TextView
      android:id="@+id/textView3"
      android:layout width="417dp"
      android:layout_height="wrap_content"
      android:layout weight="1"
      android:text="Registartion form"
      android:textAlignment="center"
      android:textSize="20sp" />
  </LinearLayout>
  <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
```

```
<TextView
    android:id="@+id/td"
    android:layout_width="wrap_content"
    android:layout_height="31dp"
    android:layout_weight="1"
    android:text="Name"
    android:textSize="16sp" />
  <EditText
    android:id="@+id/ed_name"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:ems="10"
    android:hint="enter your name"
    android:inputType="text"
    android:onClick="enter your name" />
</LinearLayout>
<LinearLayout
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:orientation="horizontal">
  <TextView
    android:id="@+id/td1"
    android:layout_width="208dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:text="Email"
    android:textSize="16sp" />
  <EditText
    android:id="@+id/ed_email"
    android:layout_width="377dp"
```

```
android:layout_height="wrap_content"
    android:layout_weight="1"
    android:ems="10"
    android:hint="enter your email"
    android:inputType="text" />
</LinearLayout>
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="55dp"
  android:orientation="horizontal"
  android:textAlignment="gravity">
  <TextView
    android:id="@+id/td2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:text="password"
    android:textSize="16sp" />
  <EditText
    android:id="@+id/ed_pass"
    android:layout_width="251dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:ems="10"
    android:hint="enter your password"
    android:inputType="textPassword" />
</LinearLayout>
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:orientation="horizontal">
  <TextView
    android:id="@+id/td3"
```

```
android:layout_width="wrap_content"
    android:layout_height="match_parent"
    android:layout_weight="1"
    android:text="Gender"
    android:textAlignment="inherit"
    android:textSize="16sp" />
  <RadioGroup
    android:id="@+id/rg_gender"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:orientation="horizontal">
    <RadioButton
      android:id="@+id/r_female"
      android:layout_width="93dp"
      android:layout_height="38dp"
      android:text="male" />
    <RadioButton
      android:id="@+id/r_male"
      android:layout_width="127dp"
      android:layout_height="wrap_content"
      android:text="Female" />
  </RadioGroup>
</LinearLayout>
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:orientation="horizontal">
  <CheckBox
    android:id="@+id/c_agree"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_weight="1"
```

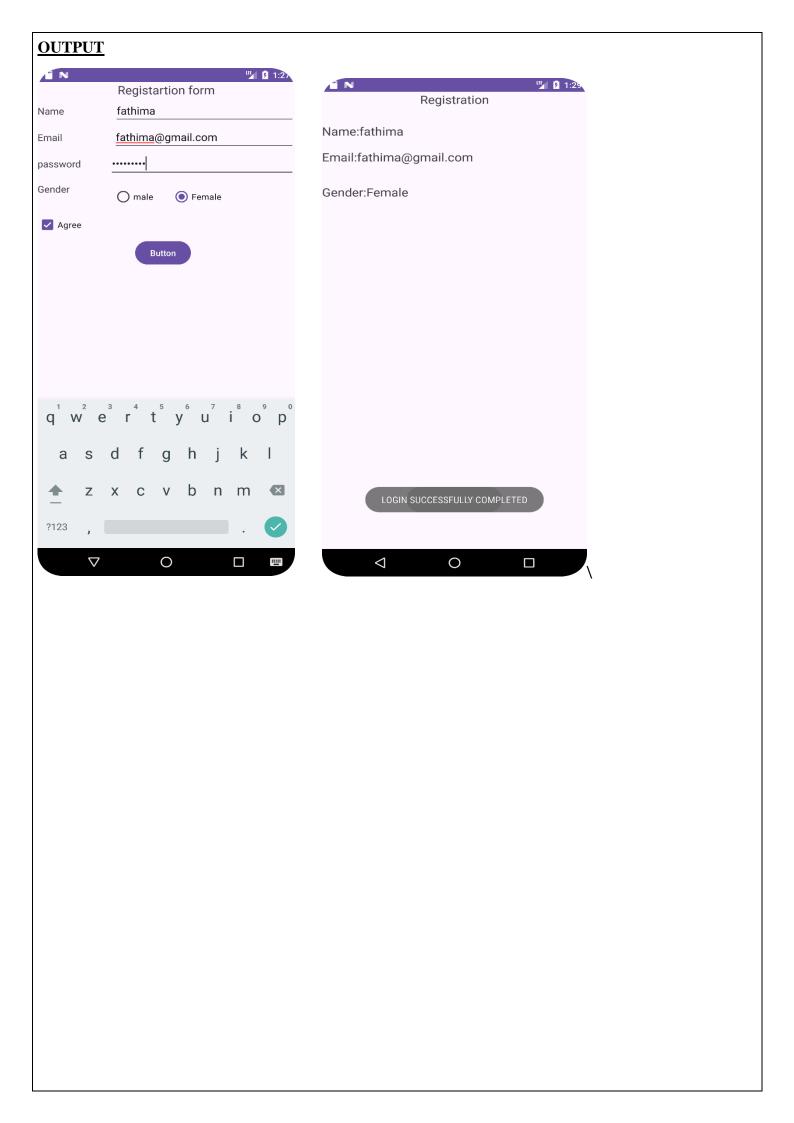
```
android:text="Agree" />
  </LinearLayout>
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
    <LinearLayout
      android:layout_width="156dp"
      android:layout_height="match_parent"
      android:layout weight="1"
      android:orientation="horizontal"></LinearLayout>
    <Button
      android:id="@+id/bn1"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:layout_weight="1"
      android:onClick="onclick"
      android:text="Button"
      android:textAlignment="center" />
  </LinearLayout>
  </LinearLayout>
MainActivity.java
package com.example.bundlelogin;
import static com.example.bundlelogin.R.id.ed_email;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.CheckBox;
import android.widget.EditText;
import android.widget.RadioButton;
import android.widget.RadioGroup;
```

```
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
  EditText name;
  EditText email;
  EditText pass;
  RadioGroup gender;
  RadioButton r_female;
  CheckBox agree;
  Button bn;
  Boolean isAllFieldsChecked;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    name=findViewById(R.id.ed_name);
    email=findViewById(ed_email);
    pass=findViewById(R.id.ed_pass);
    gender=findViewById(R.id.rg_gender);
    agree=findViewById(R.id.c_agree);
    bn=findViewById(R.id.bn1);
 }
  public void onclick(View view) {
    isAllFieldsChecked=checkAllFields();
    if(isAllFieldsChecked) {
      Toast.makeText(this, "SUCCESSFULLY", Toast.LENGTH_SHORT).show();
      Intent i=new Intent(MainActivity.this, MainActivity2.class);
      i.putExtra("name",name.getText().toString());
      i.putExtra("email",email.getText().toString());
      i.putExtra("gender",gender.getCheckedRadioButtonId()==R.id.rg_gender?"male":"Female");
      startActivity(i);
    }
 };
```

```
private boolean checkAllFields(){
    if (name.length() == 0) {
       name.setError("name is required");
       return false;
    }
    if (email.length() == 0) {
      email.setError("email is required");
       return false;
    } else {
      String email1 = email.getText().toString();
       String checkEmail = "[a-zA-Z0-9._-]+@+[a-z]+.+[a-z]";
       if (!email1.matches(checkEmail)) {
         email.setError("select email");
         return false;
      }
    }
    if (pass.length() == 8) {
       pass.setError("name is required");
       return false;
    }
    if (gender.getCheckedRadioButtonId() == -1) {
       r_female.setError("select gender");
       r_female.requestFocus();
       return false;
    }
    if (!agree.isChecked()) {
       agree.setError("please agree");
       agree.requestFocus();
       return false;
    }
    return true;
  }
}
```

```
activity_main2.xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
  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"
  android:orientation="vertical"
  tools:context=".MainActivity2">
  <TextView
    android:id="@+id/textView"
    android:layout_width="match_parent"
    android:layout_height="55dp"
    android:text="Registration"
    android:textAlignment="center"
    android:textSize="20sp"/>
  <TextView
    android:id="@+id/textView2"
    android:layout_width="match_parent"
    android:layout_height="45dp"
    android:text="name"
    android:textSize="20sp" />
  <TextView
    android:id="@+id/textView4"
    android:layout_width="match_parent"
    android:layout_height="61dp"
    android:text="email"
    android:textSize="20sp" />
  <TextView
    android:id="@+id/textView5"
    android:layout_width="match_parent"
    android:layout_height="46dp"
    android:text="gender"
```

```
android:textSize="20sp" />
</LinearLayout>
MainActivity.java
package com.example.bundlelogin;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.TextView;
import android.widget.Toast;
public class MainActivity2 extends AppCompatActivity {
   TextView displayname, displaymail, displaygender;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main2);
    Toast.makeText(this, "LOGIN SUCCESSFULLY COMPLETED", Toast.LENGTH_SHORT).show();
    displayname=findViewById(R.id.textView2);
    displaymail=findViewById(R.id.textView4);
    displaygender=findViewById(R.id.textView5);
    String name=getIntent().getStringExtra("name");
    String email=getIntent().getStringExtra("email");
    String gender=getIntent().getStringExtra("gender");
    displayname.setText ("Name:"+name);
    displaymail.setText ("Email:"+email);
    displaygender.setText ("Gender:"+gender);
  }
}
```



Date:24/10/2024

### **LISTVIEW**

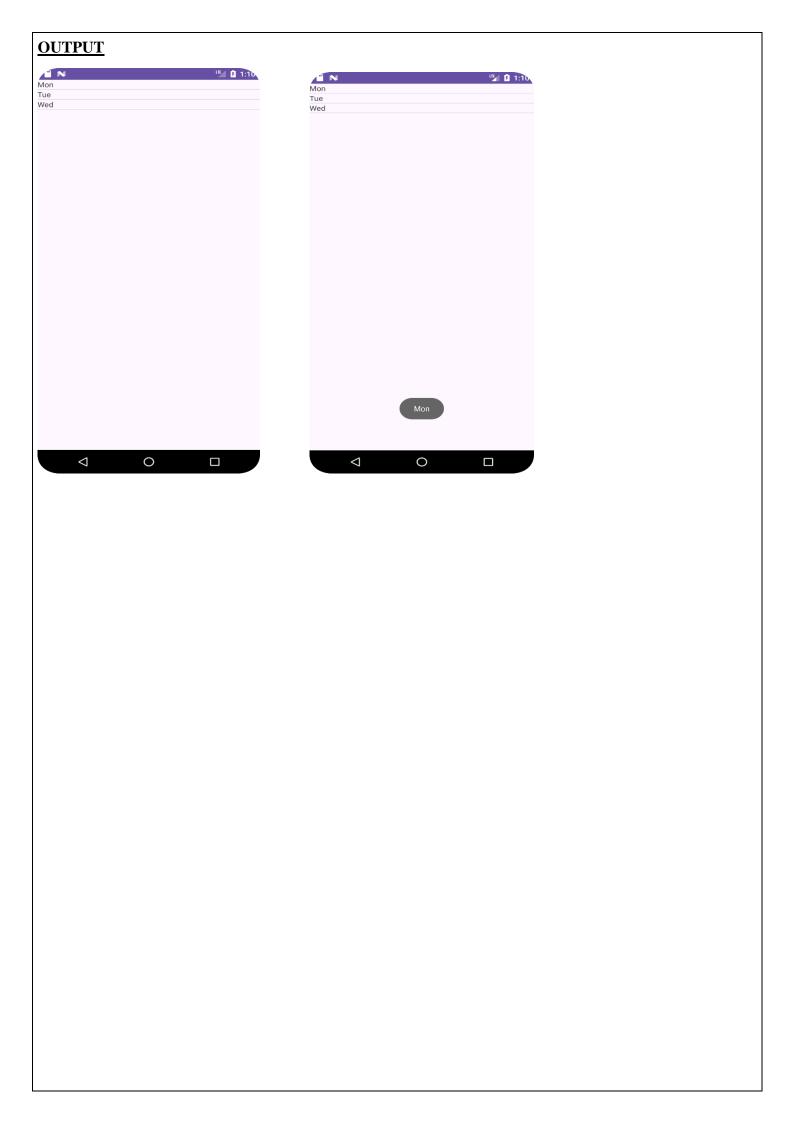
# <u>AIM</u>

Develop an application that uses Array adaptor with list view

```
activity_main.xml
```

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
 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"
  android:orientation="vertical"
  tools:context=".MainActivity">
  <ListView
    android:id="@+id/listview"
    android:layout_width="match_parent"
    android:layout_height="match_parent" />
</LinearLayout>
MainActivity.java
package com.example.listview;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Adapter;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
ListView lv;
String[] s={"Mon","Tue","Wed"};
```

```
@Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    lv=findViewById(R.id.listview);
    ArrayAdapter<String>adapter=new ArrayAdapter<String>(this,R.layout.layout,R.id.month,s);
    lv.setAdapter(adapter);
    lv.setOnItemClickListener(new AdapterView.OnItemClickListener() {
      @Override
      public void onItemClick(AdapterView<?> adapterView, View view, int i, long I) {
Toast.makeText(getApplicationContext(),lv.getItemAtPosition(i).toString(),Toast.LENGTH_LONG).show();
      }
    });
  }
}
Layout.xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:orientation="vertical">
  <TextView
    android:id="@+id/month"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:text="MONTH" />
</LinearLayout>
```



Date:24/10/2024

### **OPTIONS MENU**

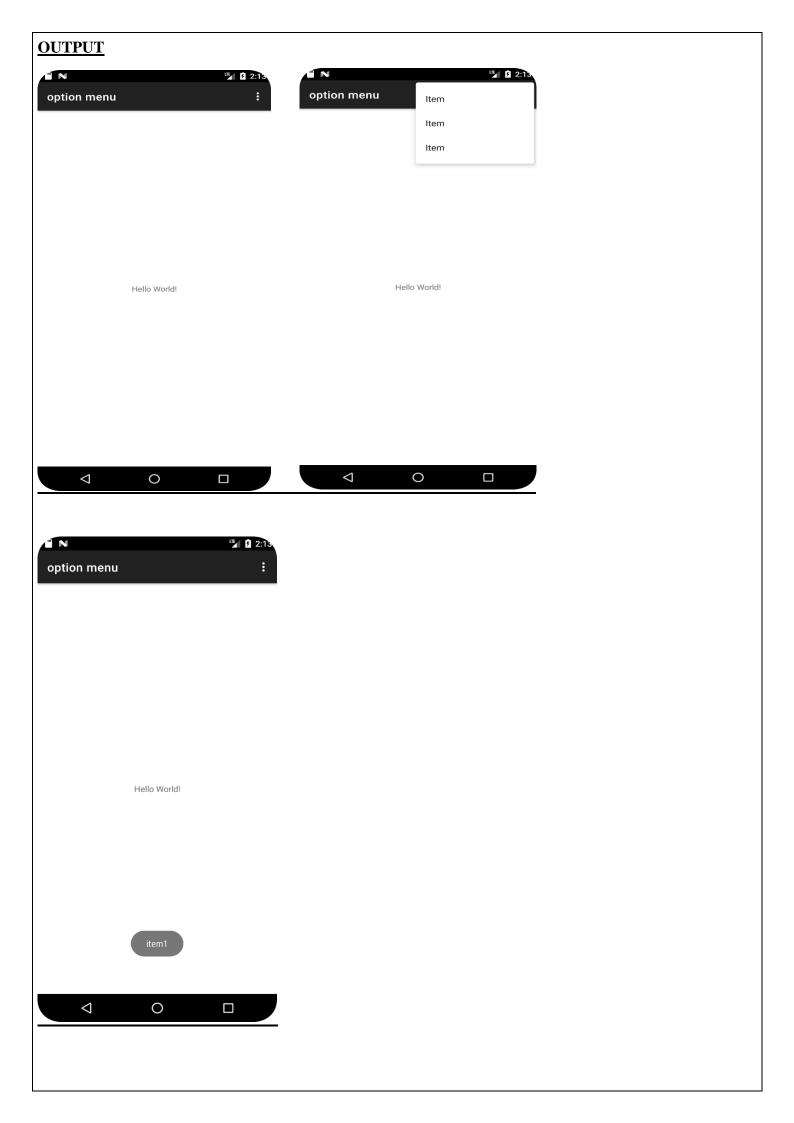
# **AIM**

Develop an application to implement an options menu

```
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">
  <TextView
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:text="Hello World!"
    app:layout constraintBottom toBottomOf="parent"
    app:layout constraintEnd toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
MainActivity.java
package com.example.optionmenu;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
import android.widget.Toast;
```

```
public class MainActivity extends AppCompatActivity {
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
  }
  @Override
  public boolean onCreateOptionsMenu(Menu menu) {
    MenuInflater inflater=getMenuInflater();
    inflater.inflate(R.menu.submenu,menu);
    return true;
  }
  @Override
  public boolean onOptionsItemSelected(@NonNull MenuItem item) {
    if (item.getItemId()==R.id.item1)
    {
      Toast.makeText(this,"item1",Toast.LENGTH_SHORT).show();
    } else if (item.getItemId()==R.id.item2) {
      Toast.makeText(this, "item2", Toast.LENGTH_SHORT).show();
    }
    else {
      Toast.makeText(this, "item3", Toast.LENGTH_SHORT).show();
    }
    return true;
  }
}
menu.xml
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">
</menu>
submenu.xml
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">
```

```
<item
    android:id="@+id/item1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:title="Item"/>
  <item
    android:id="@+id/item2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:title="Item"/>
  <item
    android:id="@+id/item3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:title="Item" />
</menu>
themes.xml
<resources xmlns:tools="http://schemas.android.com/tools">
  <!-- Base application theme. -->
  <style name="Base.Theme.OptionMenu" parent="Theme.MaterialComponents.DayNight.DarkActionBar">
    <!-- Customize your light theme here. -->
    <!-- <item name="colorPrimary">@color/my_light_primary</item> -->
  </style>
  <style name="Theme.OptionMenu" parent="Base.Theme.OptionMenu" />
</resources>
```



Date:7/11/2024

### **DATABASE CREATION**

# **AIM**

Create database using SQLite and perform insert, select, upsate and delete on SQLite database.

#### activity\_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
 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">
  <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical">
    <TextView
      android:id="@+id/textView"
      android:layout width="match parent"
      android:layout height="wrap content"
      android:text="EMPLOYEE DETAILS"
      android:textAlignment="center"
      android:textColor="@color/design_default_color_error" />
    <EditText
      android:id="@+id/ET id"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:ems="10"
      android:hint="ID"
      android:inputType="textPersonName" />
```

```
<EditText
  android:id="@+id/ET_name"
  android:layout_width="match_parent"
  android:layout_height="57dp"
  android:ems="10"
  android:hint="Name"
  android:inputType="textPersonName" />
<EditText
  android:id="@+id/ET_place"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:ems="10"
  android:hint="Place"
  android:inputType="textPersonName" />
<Button
  android:id="@+id/B_SUBMIT"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:text="Insert" />
<Button
  android:id="@+id/B_sel"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:text="Select" />
<Button
  android:id="@+id/B_update"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:text="UPDATE" />
<Button
  android:id="@+id/B_delete"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
```

```
android:text="DELETE" />
    <Button
      android:id="@+id/B_clear"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:text="CLEAR" />
    <TextView
      android:id="@+id/T id"
      android:layout_width="match_parent"
      android:layout_height="46dp" />
    <TextView
      android:id="@+id/T_name"
      android:layout_width="match_parent"
      android:layout_height="55dp" />
    <TextView
      android:id="@+id/T_place"
      android:layout_width="match_parent"
      android:layout_height="47dp" />
  </LinearLayout>
</LinearLayout>
MainActivity.java
package com.example.employee;
import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;
import java.util.ArrayList;
```

```
public class MainActivity extends AppCompatActivity {
 EditText ename, eplace, eid;
 Button bsubmit,bsel,bup,bdel,bclr;
 TextView tid,tname,tplace;
 SQLiteDatabase db;
 AlertDialog.Builder builder;
 @Override
 protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity main);
               =(EditText) findViewById(R.id.ET_name);
    ename
               =(EditText) findViewById(R.id.ET_place);
    eplace
    eid =(EditText)findViewById(R.id.ET_id);
    bsubmit
               =(Button) findViewById(R.id.B_SUBMIT);
    bsel
               =(Button) findViewById(R.id.B_sel);
    tid =(TextView) findViewById(R.id.T_id);
    tname
               =(TextView) findViewById(R.id.T_name);
    tplace
               =(TextView) findViewById(R.id.T_place);
    bup
               =(Button) findViewById(R.id.B_update);
    bdel
               =(Button)findViewById(R.id.B_delete);
    bclr
               =(Button)findViewById(R.id.B_clear);
    builder
               = new AlertDialog.Builder(this);
    try{
      db = openOrCreateDatabase("empdb", MODE PRIVATE, null);
      db.execSQL("Create table employee(id integer primary key,name Text,place Text)");
      Toast.makeText(getApplicationContext(), "Created Successfully", Toast.LENGTH SHORT).show();
    }
    catch(Exception e)
    {
    }
    bsubmit.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View view) {
```

```
try {
           db.execSQL("Insert into employee values
("+eid.getText().toString()+",'"+ename.getText().toString()+"','"+eplace.getText().toString()+"')");
           Toast.makeText(getApplicationContext(), "Record Inserted Successfully",
Toast.LENGTH SHORT).show();
        }
        catch (Exception e) {
           Toast.makeText(getApplicationContext(), "Error in Data", Toast.LENGTH_SHORT).show();
        }
      }
    });
    bclr.callOnClick();
    bsel.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View view) {
        Cursor c = db.rawQuery("select * from employee ", null);
        if (c.getCount() == 0) {
           Toast.makeText(getApplicationContext(), "No such record", Toast.LENGTH_SHORT).show();
        } else {
      /* c.moveToFirst();
        tid.setText(c.getString(0));
        tname.setText(c.getString(1));
        tplace.setText(c.getString(2));
      }*/
           StringBuffer b = new StringBuffer();
           while (c.moveToNext()) {
             b.append("Id:" + c.getString(0) + "\n");
             b.append("Name:" + c.getString(1) + "\n");
             b.append("Place:" + c.getString(2) + "\n");
             // on below line we are creating a new array list.
           }
           Toast.makeText(getApplicationContext(), b.toString(), Toast.LENGTH_LONG).show();
```

```
builder.setMessage(b.toString());
                                   AlertDialog alert = builder.create();
                                   alert.setTitle("Employee Data");
                                   alert.show();
                            }
                     }
              });
              bup.setOnClickListener(new View.OnClickListener() {
                     @Override
                     public void onClick(View view) {
                            db.execSQL("update employee set
name='"+ename.getText().toString()+"',place='"+eplace.getText().toString()+"' where the place of the place 
id="+eid.getText().toString()+"");
                            Toast.makeText(getApplicationContext(), "updated....", Toast.LENGTH_SHORT).show();
                     }
              });
              bdel.setOnClickListener(new View.OnClickListener() {
                     @Override
                     public void onClick(View view) {
                            db.execSQL("delete from employee where id="+eid.getText().toString());
                            Toast.makeText(getApplicationContext(), "Item Deleted", Toast.LENGTH_SHORT).show();
                     }
              });
              bclr.setOnClickListener(new View.OnClickListener() {
                     @Override
                     public void onClick(View view) {
                            eid.setText("");
                            ename.setText("");
                            eplace.setText("");
                     }
              });
              bclr.callOnClick();
      }}
```

