

# **Mobile Application Development Lab**

**(20 MCA 243)**

## **LAB RECORD**

*Submitted in partial fulfillment of the requirements for the award of  
the degree of Master of Computer Applications of A P J Abdul Kalam  
Technological University*

**Submitted by:**

**MATHEW G KURIAN (SJC21MCA-2032)**



## **MASTER OF COMPUTER APPLICATIONS**

**ST. JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY, PALAI**  
**CHOONDACHERRY P.O, KOTTAYAM**  
**KERALA**  
**DECEMBER 2022**

# **ST. JOSEPH' S COLLEGE OF ENGINEERING AND TECHNOLOGY, PALAI**

*(An ISO 9001: 2008 Certified College)*  
**CHOONDACHERRY P.O, KOTTAYAM KERALA**



## ***CERTIFICATE***

*This is to certify that the Mobile Application Development Lab Record (20 MCA 243) submitted by **Mathew G Kurian** student of **Third** semester **MCA** at **ST. JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY, PALAI** in partial fulfillment for the award of Master of Computer Applications is a bonafide record of the lab work carried out by him under our guidance and supervision. This record in any form has not been submitted to any other University or Institute for any purpose.*

**Mr. Akhil Sekharan**  
**Faculty In- Charge**

**Mr. Anish Augustine**  
**(HoD In Charge-MCA)**

Submitted for the End Semester Examination held on \_\_\_\_\_

**Examiner 1:**

**Examiner 2:**

# DECLARATION

I **Mathew G Kurian**, do hereby declare that the *Mobile Application Development Lab Record (20 MCA 243)* is a record of work carried out under the guidance Mr.Akhil Sekharan , Asst. Professor, Department of MCA, SJCET, Palai as per the requirement of the curriculum of Master of Computer Applications Programme of A P J Abdul Kalam Technological University, Thiruvananthapuram. Further, I also declare that this record has not been submitted, full or part thereof, in any University / Institution for the award of any Degree / Diploma.

Place: Choondacherry  
Date :

Mathew G Kurian  
(SJC21MCA-2032)

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## 1.Design a Login Page

### **PROGRAM**

#### **Activity\_main.xml**

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

<android.support.constraint.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">

<LinearLayout

android:layout_width="match_parent"

android:layout_height="match_parent" android:orientation="vertical">

<EditText android:id="@+id/editText"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:ems="10"

android:inputType="textPersonName"

android:text="USERNAME"

android:textColor="@color/colorAccent"

tools:layout_editor_absoluteX="85dp"

tools:layout_editor_absoluteY="54dp" />

<EditText

android:id="@+id/editText2"
```

```
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="textPersonName"
        android:text="PASSWORD"
        android:textColor="@color/colorAccent"
        " tools:layout_editor_absoluteX="85dp"
        tools:layout_editor_absoluteY="175dp"
    />
    <Button
        android:id="@+id/button"
        android:layout_width="120dp"
        android:layout_height="wrap_content"
        android:background="@color/colorPrimary"
        android:text="LOGIN"
        android:textSize="30sp"
        tools:layout_editor_absoluteX="148dp"
        tools:layout_editor_absoluteY="303dp" />
</LinearLayout>
</android.support.constraint.ConstraintLayout>
```

### **Main\_Activity.java**

```
package com.example.sjcet.c3;

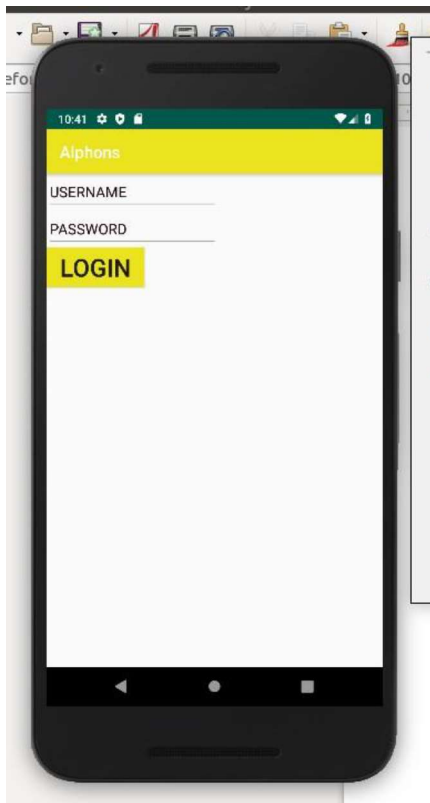
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;

public class MainActivity extends AppCompatActivity {
```

@Override

```
protected void onCreate(Bundle  
savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    setContentView(R.layout.activity_main);  
}  
}
```

## **OUTPUT**





## 2. Change content in the text view on a button click

### **PROGRAM**

#### **Activity\_main.xml**

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical"

android:gravity="center"

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

<TextView

android:id="@+id/tv"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="ANU"/>

<Button

android:id="@+id/btn1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Change"

android:onClick="change"/>

</LinearLayout>

#### **Main\_Activity.java**

package

com.example.sjcet.buttonclick2;

import android.os.Bundle;

import

android.support.v7.app.AppCompatActivity;

import android.view.View;

import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

TextView tv;

```
@Override
protected void onCreate(Bundle
savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    tv = findViewById(R.id.tv);
}
public void change(View view) {
    tv.setText("Essa");
}
}
```

### **OUTPUT**



### 3. Read a value from edit text and print it in a text view

#### **PROGRAM**

##### **Activity main.xml**

```
<LinearLayout
    android:layout_height="match_parent"
    android:layout_width="match_parent"
    android:orientation="vertical"
    xmlns:android="http://schemas.android.com/apk/res/android">

    <EditText
        android:id="@+id/text1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Text"/>

    <Button
        android:id="@+id/btn"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Change"
        android:onClick="Click"
    />

    <TextView
        android:id="@+id/text2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
    />
```

```
</LinearLayout>
```

**Main\_Activity.java**

```
package com.example.sjcet.c3;

import

android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import

android.widget.EditText;

import

android.widget.TextView;

public class MainActivity extends AppCompatActivity {

    EditText text1;

    TextView text2;

    Button btn;

    @Override

    protected void onCreate(Bundle

savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        text1=(EditText)findViewById(R.id.text1);

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

        text2=(TextView)findViewById(R.id.text2);

    }
```

```
public void Click(View view) {  
  
    String content=  
    text1.getText().toString();  
    text2.setText(content);  
  
}  
  
}
```

### **OUTPUT**



#### 4.change the baground color on a button click

##### PROGRAM

###### Activity\_main.xml

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_gravity="center">
    <Button
        android:id="@+id/bt"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:onClick="click"
        android:text="CHANGE" />
</LinearLayout>
```

###### Main\_Activity.java

```
com.example.sjcet.background;
import android.widget.Button;
import android.view.View;
import
android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
public class MainActivity extends AppCompatActivity {
    View v;
    Button bt;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        v=this.getWindow().getDecorView();
        bt=(Button)
        findViewById(R.id.bt);
```

```
public void click(View view) {  
    v.setBackgroundResource(android.R.color.holo_orange_light)  
;  
}  
}
```

### **OUTPUT**



## 5.create a simple calculator

### PROGRAM

#### Activity\_Main.java

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
d" 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/ed1"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_marginTop="16dp"
android:ems="10"
android:inputType="textPersonName"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />

<EditText
android:id="@+id/ed2"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_marginTop="24dp"
android:ems="10"
android:inputType="textPersonName"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/ed1" />
```



```
<Button
android:id="@+id/btn1"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="132dp"
android:onClick="add" android:text="+"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/ed2"
/>

<Button android:id="@+id/btn2"
android:layout_width="wrap_content"
android:layout_height="0dp"
android:onClick="sub"
android:text="-"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/btn1" />

<Button android:id="@+id/btn3"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="60dp"
android:onClick="mul"
android:text="*"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/btn1" />

<Button android:id="@+id/btn4"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="12dp"
android:onClick="div" android:text="/"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.067"
```

```
app:layout_constraintStart_toEndOf="@+id/btn3"
app:layout_constraintTop_toBottomOf="@+id/btn2" />
```

```
<TextView
    android:id="@+id/txt1"
    android:layout_width="384dp"
    android:layout_height="21dp"
    android:layout_marginTop="80
    dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/ed1"
/>
</android.support.constraint.ConstraintLayout>
```

### **Main\_Activity.java**

```
package com.example.sjcet.simplecalculator;

import
    android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import
    android.widget.EditText;
import
    android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    TextView tv1;
    EditText
    et1,et2;int
    ed1,ed2;
    @Override
    protected void onCreate(Bundle
    savedInstanceState) {
```

```
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
}

public void add(View view) {
    et1 = (EditText)findViewById(R.id.ed1);
    et2 = (EditText)findViewById(R.id.ed2);
    tv1 = (TextView)findViewById(R.id.txt1);
    String s1 = et1.getText().toString();
    String s2 = et2.getText().toString();
    ed1 = Integer.parseInt(s1);
    ed2 = Integer.parseInt(s2);
    int sum = ed1 + ed2;
    tv1.setText(Integer.toString(sum));
}

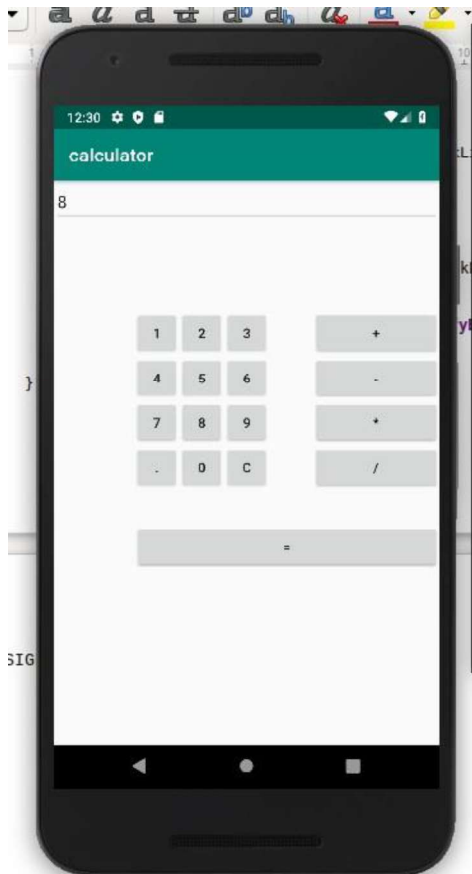
public void sub(View view) {
    et1 = (EditText)findViewById(R.id.ed1);
    et2 = (EditText)findViewById(R.id.ed2);
    tv1 = (TextView)findViewById(R.id.txt1);
    String s1 = et1.getText().toString();
    String s2 = et2.getText().toString();
    ed1 = Integer.parseInt(s1);
    ed2 = Integer.parseInt(s2);int
    sum = ed1 - ed2;
    tv1.setText(Integer.toString(sum));
}

public void mul(View view) {
    et1 = (EditText)findViewById(R.id.ed1);
    et2 = (EditText)findViewById(R.id.ed2);
    tv1 = (TextView)findViewById(R.id.txt1);
    String s1 = et1.getText().toString();
    String s2 = et2.getText().toString();
    ed1 = Integer.parseInt(s1);
    ed2 = Integer.parseInt(s2);
```

```
int sum = ed1 * ed2;
tv1.setText(Integer.toString(sum));
}

public void div(View view) {
    et1 = (EditText)findViewById(R.id.ed1);
    et2 = (EditText)findViewById(R.id.ed2);
    tv1 = (TextView)findViewById(R.id.txt1);
    String s1 = et1.getText().toString();
    String s2 = et2.getText().toString();
    ed1 = Integer.parseInt(s1);
    ed2 = Integer.parseInt(s2);
    int sum = ed1 / ed2;
    tv1.setText(Integer.toString(sum));
}
}
```

### **OUTPUT**



## **6. create two activity from the button click move to the second activity using intent**

### **PROGRAM**

#### **Activity\_Main.xml**

```
<LinearLayout android:layout_width="match_parent"
android:layout_height="match_parent"android:orientation="vertical"
android:gravity="center"
xmlns:android="http://schemas.android.com/apk/res/android"
>
<Button
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="MOVE TO NEXT
ACTIVITY"android:id="@+id/bt"
android:onClick="click"
android:gravity="center"/>
</LinearLayout>
```

#### **Activity\_main2.xml**

```
<LinearLayout android:layout_width="match_parent"
android:layout_height="match_parent"android:orientation="vertical"
android:gravity="center"
android:background="@android:color/holo_blue_light"
xmlns:android="http://schemas.android.com/apk/res/android"
>
<TextView
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="WELCOME TO THE SECOND ACTIVITY"
android:id="@+id/tv" />
</LinearLayout>
```

#### **Main\_Activity.java**

```
package
```

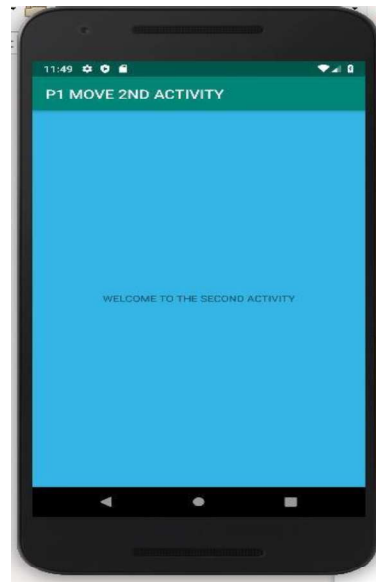
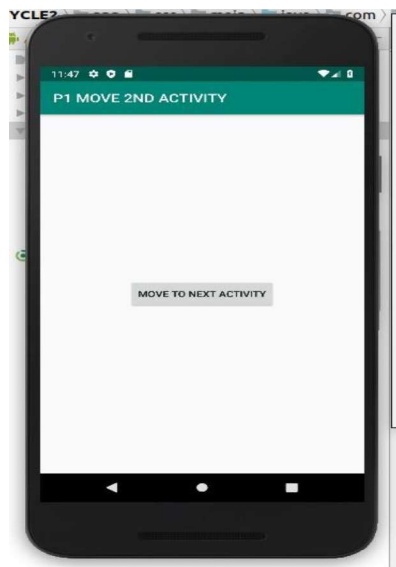
```
com.example.sjcet.cycle2_1;
import android.content.Intent;
import
android.widget.Button;
import android.view.View;
import
android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
public class MainActivity extends
AppCompatActivity {Button bt;
protected void onCreate(Bundle
savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
bt=findViewById(R.id.bt);
}
public void click(View view) {
OpenNewActivity();
}
public void OpenNewActivity()
{
Intent intent=new Intent(this,
Main2Activity.class);startActivity(intent);
}
}
```

**Main\_Activity2.java**

```
package com.example.sjcet.cycle2_1;
import
android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
public class Main2Activity extends AppCompatActivity {
@Override
protected void onCreate(Bundle
savedInstanceState) {
```

```
super.onCreate(savedInstanceState);  
setContentView(R.layout.activity_main2);  
}  
}
```

## **OUTPUT**



## **7.Create an activity and move to facebook login page on button click**

### **PROGRAM**

#### **Activity\_Main.xml**

```
<LinearLayout android:layout_width="match_parent"
android:layout_height="match_parent"android:orientation="vertical"
android:gravity="center"
xmlns:android="http://schemas.android.com/apk/res/android"
>

<Button
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="MOVE TO FB PAGE"
android:id="@+id/bt"
android:onClick="click"
android:gravity="center"/>

</LinearLayout>
```

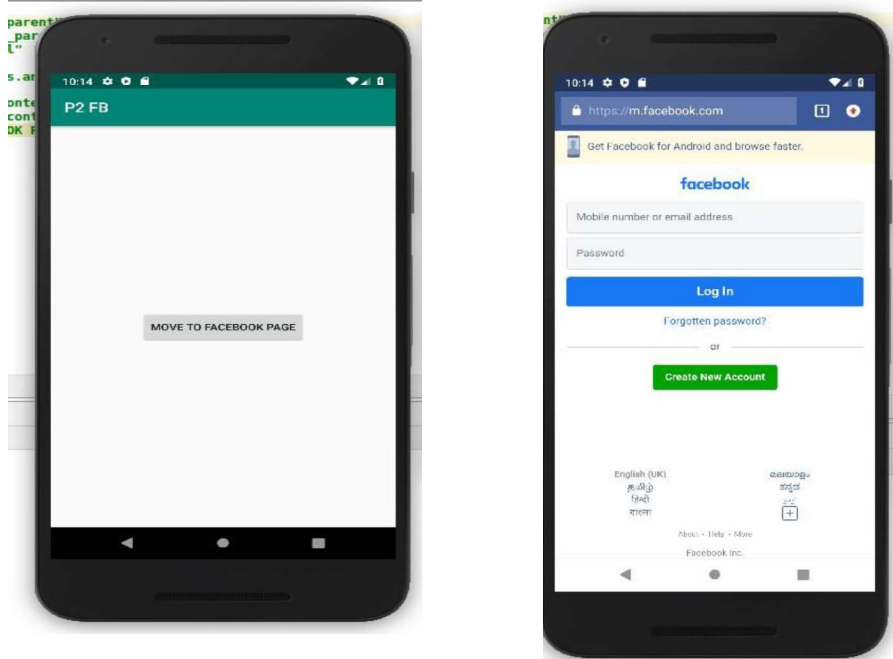
#### **Main\_Activity.java**

```
package
com.example.sjcet.myapplication;
import android.content.Intent;
import android.net.Uri;
import
android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import
android.widget.Button;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle
savedInstanceState) {
```



```
super.onCreate(savedInstanceState);  
setContentView(R.layout.activity_main);  
  
Button btn_Explicit = (Button)findViewById(R.id.bt);  
btn_Explicit.setOnClickListener(new  
View.OnClickListener() {@Override  
public void onClick(View view) {  
  
Intent intent = new Intent(Intent.ACTION_VIEW,Uri.parse("https://www.facebook.com/"));  
startActivity(intent);  
}  
});  
}  
}
```

## **OUTPUT**



## 8. Read message in the first activity and pass it to the 2nd activity on a button click

### PROGRAM

#### Activity\_Main.xml

```
<LinearLayout android:layout_width="match_parent"
android:layout_height="match_parent"android:orientation="vertical"
xmlns:android="http://schemas.android.com/apk/res/android">
<EditText
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:id="@+id/et"
android:textColor="@android:color/holo_red_dark"/>
<Button
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="MOVE TO NEXT
ACTIVITY"android:id="@+id/bt"
android:onClick="click"
/>
</LinearLayout>
```

#### Activity\_main2.xml

```
<LinearLayout android:layout_width="match_parent"
android:layout_height="match_parent"android:orientation="vertical"
android:gravity="center"
xmlns:android="http://schemas.android.com/apk/res/android"
>
<TextView
android:layout_width="match_parent"
android:layout_height="wrap_content"
```

```
android:id="@+id/tv"
```

```
/
```

```
</LinearLayout>
```

### **Main\_Activity.java**

```
package
```

```
com.example.sjcet.myapplication;
```

```
import android.content.Intent;
```

```
import
```

```
android.support.v7.app.AppCompatActivity;
```

```
import android.os.Bundle;
```

```
import android.view.View;
```

```
import android.widget.Button;
```

```
import
```

```
android.widget.EditText;
```

```
public class MainActivity extends AppCompatActivity {
```

```
    Button bt;
```

```
    EditText et;
```

```
    protected void onCreate(Bundle
```

```
savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
```

```
        setContentView(R.layout.activity_main);
```

```
        bt
```

```
        =findViewById(R.id.bt)
```

```
        ;et
```

```
        =findViewById(R.id.et)
```

```
;
}

public void onClick(View v) {
    String str = et.getText().toString();

    Intent intent = new Intent(getApplicationContext(),
    Main2Activity.class);intent.putExtra("message_key", str);

    startActivity(intent);
}
}
```

### **Main\_Activity2.java**

```
package

com.example.sjcet.myapplication;

import android.widget.TextView;

import android.content.Intent;

import

android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

public class Main2Activity extends

AppCompatActivity {TextView tv;

    @Override

    protected void onCreate(Bundle

    savedInstanceState) {

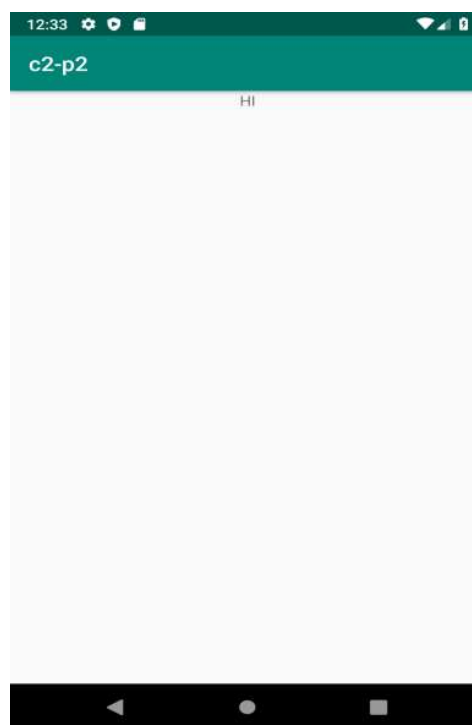
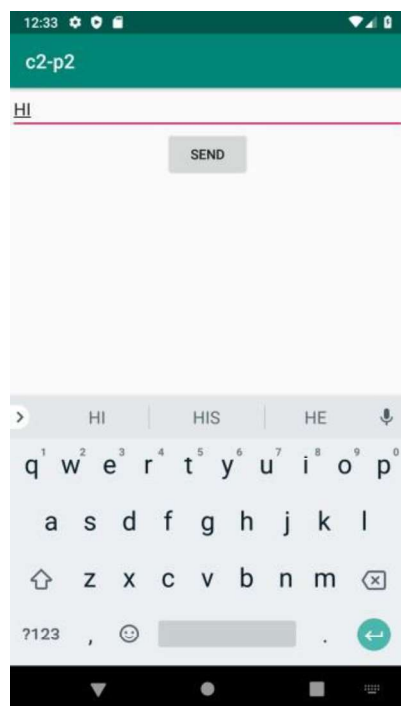
        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main2);

        tv=findViewById(R.id.tv);
```

```
Intent intent = getIntent();  
  
String str = intent.getStringExtra("message_key");  
  
tv.setText(str);  
  
}  
  
}
```

### **OUTPUT**



**9.create a registration page with full validation and pass the information to the second activity(using shared preference)**

**Mandatory fields : fname,lname,gender,email,phone number,password,dob(date picker)**

**PROGRAM**

**Activity\_Main.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:tools="http://schemas.android.com/tools"
android:id="@+id/activity_main"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:orientation="vertical" >
<EditText
android:id="@+id/editTextName"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:ems="10"
android:hint="Enter First Name"
android:inputType="textPersonName" />
<EditText
android:id="@+id/editTextlName"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:ems="10"
android:hint="Enter Last Name"
android:inputType="textPersonName" />
<EditText
android:id="@+id/editTextgender"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:ems="10"
android:hint="Enter Gender"
```

```
        android:inputType="textPersonName" />
    <EditText
        android:id="@+id/editTextEmail"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="Enter Email"
        android:inputType="textPersonName" />
    <EditText
        android:id="@+id/editTextMobile"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="Enter Mobile Number"
        android:inputType="textEmailAddress"
    />
    <EditText
        android:id="@+id/editTextDob"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="Enter Date of Birth
(DD/MM/YYYY)" android:inputType="date" />
    <EditText
        android:id="@+id/editTextpassword"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="Enter Password"
        android:inputType="textPassword"
    />

    <Button
        android:id="@+id/buttonSubmit"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Submit" />
</LinearLayout>
```

**Activity\_Main2.xml**

```
<LinearLayout android:layout_width="match_parent"
android:layout_height="match_parent"android:orientation="vertical"
android:gravity="center"
xmlns:android="http://schemas.android.com/apk/res/android"
>
<TextView
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:id="@+id/tv"
/>
<TextView
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:id="@+id/tv1"
/>
<TextView
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:id="@+id/tv2"
/>
<TextView
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:id="@+id/tv3"
/>

<TextView
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:id="@+id/tv4"
/>
<TextView
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:id="@+id/tv5"
/>
```



```
<TextView
```

```
    android:layout_width="match_parent"
```

```
    android:layout_height="wrap_content"
```

```
    android:id="@+id/tv6"
```

```
</LinearLayout>
```

### **Main\_Activity.java**

```
import
```

```
    android.content.Intent;
```

```
import android.net.Uri;
```

```
import
```

```
    android.support.v7.app.AppCompatActivity;
```

```
import android.os.Bundle;
```

```
import
```

```
    android.text.TextUtils;
```

```
import
```

```
    android.util.Patterns;
```

```
import android.view.View;
```

```
import
```

```
    android.widget.DatePicker;
```

```
import
```

```
    android.widget.EditText;
```

```
import android.widget.Button;
```

```
import android.widget.Toast;
```

```
import android.content.SharedPreferences;
```

```
public class MainActivity extends AppCompatActivity {
```

```
    EditText editTextName, editTextlName, editTextEmail,
```

```
    editTextMobile, editTextDob, editTextgender, editTextpassword;
```

```
    Button
```

```
    buttonSubmit;
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
```

```
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
buttonSubmit=findViewById(R.id.buttonSubmit);
editTextName=findViewById(R.id.editTextName);
editTextlName=findViewById(R.id.editTextlName);
editTextEmail=findViewById(R.id.editTextEmail);
editTextMobile=findViewById(R.id.editTextMobile);
editTextDob=findViewById(R.id.editTextDob);
editTextgender=findViewById(R.id.editTextgender);
editTextpassword=findViewById(R.id.editTextpassword);
buttonSubmit.setOnClickListener(new View.OnClickListener()
{
    @Override
    public void onClick(View view) {
        checkDataEntered();
        SharedPreferences mypref=getSharedPreferences("activity_main2.xml",0);
        SharedPreferences.Editor editor=mypref.edit();//only write editor
        editor.putString("fname",editTextName.getText().toString()); //bundle the
        dataeditor.putString("lname",editTextlName.getText().toString());
        editor.putString("gender",editTextgender.getText().toString());
        editor.putString("phone",editTextMobile.getText().toString());
        editor.putString("pwd",editTextpassword.getText().toString());
        editor.putString("email",editTextEmail.getText().toString());
        editor.putString("dob",editTextDob.getText().toString());
        editor.commit();
        // String str = editTextName.getText().toString();
        //String str1 = editTextName.getText().toString();
        Intent intent = new Intent(getApplicationContext(),
        Main2Activity.class);
        intent.putExtra("fname",editTextName.getText().toString());
        intent.putExtra("lname",editTextlName.getText().toString());
        intent.putExtra("gender",editTextgender.getText().toString());
        intent.putExtra("phone",editTextMobile.getText().toString());
        intent.putExtra("pwd",editTextpassword.getText().toString());
        intent.putExtra("email",editTextEmail.getText().toString());
```

```
intent.putExtra("dob",editTextDob.getText().toString());
startActivity(intent);
}
});
}
boolean isEmail(EditText text) {
CharSequence email = text.getText().toString();return (!TextUtils.isEmpty(email) &&
Patterns.EMAIL_ADDRESS.matcher(email).matches());
}
boolean isEmpty(EditText text) {
CharSequence str = text.getText().toString();
return TextUtils.isEmpty(str);
}
void checkDataEntered() {
if (isEmpty(editTextName)) {
Toast t = Toast.makeText(this, "You must enter first name to register!",
Toast.LENGTH_SHORT);
t.show();
}
if (isEmpty(editTextlName)) {
editTextlName.setError("Last name is required!");
}
if (isEmpty(editTextMobile)) {
editTextMobile.setError("mobile number is required!");
}
if (isEmpty(editTextgender)) {
editTextgender.setError("Gender is required!");
}
if (isEmpty(editTextpassword)) {
editTextpassword.setError("Password is required!");
}
if (isEmpty(editTextDob)) {
editTextDob.setError("DOB is required!");
}
}
```

```
if (isEmail(editTextEmail) == false) {  
    editTextEmail.setError("Enter valid email!");  
}  
}  
}
```

### **Main\_Activity2.java**

```
import android.content.SharedPreferences;  
import  
android.widget.TextView;  
import android.content.Intent;  
import  
android.support.v7.app.AppCompatActivity;  
import android.os.Bundle;  
public class Main2Activity extends  
    AppCompatActivity {  
    TextView tv,tv1,tv2,tv3,tv4,tv5,tv6;  
    @Override  
    protected void onCreate(Bundle  
        savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main2);  
        tv =findViewById(R.id.tv);  
        tv1 =findViewById(R.id.tv1);  
        tv2 =findViewById(R.id.tv2);  
        tv3 =findViewById(R.id.tv3);  
        tv4 =findViewById(R.id.tv4);  
        tv5 =findViewById(R.id.tv5);  
        tv6 =findViewById(R.id.tv6);  
        Intent intent = getIntent();  
        SharedPreferences  
        mypref=getSharedPreferences("activity_main2.xml",0);String str =  
        mypref.getString("fname",null);  
        String str1 = mypref.getString("lname",null);  
        String str2 = mypref.getString("gender",null);
```

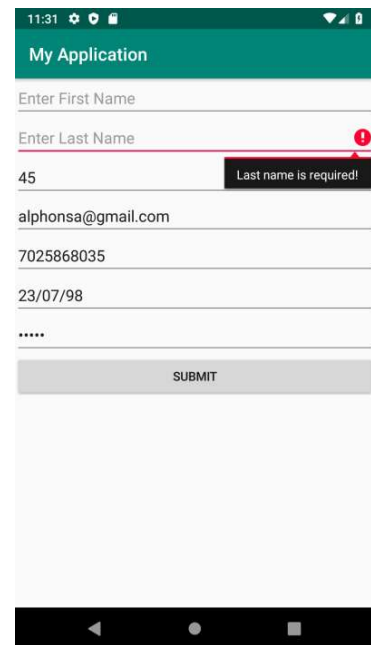
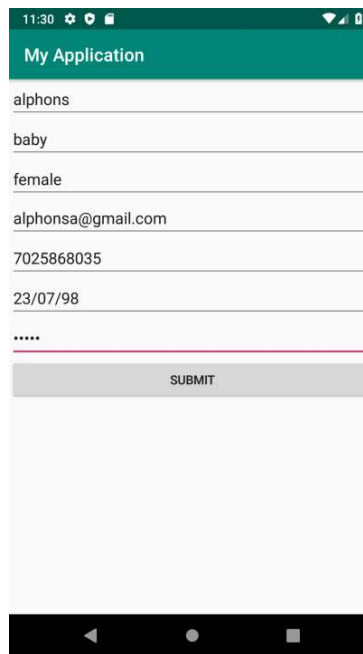
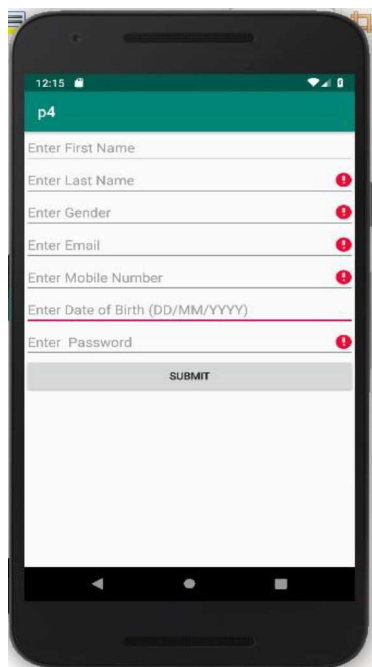
```

String str3 = mypref.getString("phone",null);
String str4 = mypref.getString("pwd",null);
String str5 = mypref.getString("email",null);
String str6 = mypref.getString("dob",null);
tv.setText(str);
tv1.setText(str1);
tv2.setText(str2);
tv3.setText(str3);
tv4.setText(str4);
tv5.setText(str5);
tv6.setText(str6);
}

}

```

### **OUTPUT**



## 10. login and registration

### **PROGRAM**

#### **Activity\_home.xml**

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

<android.support.constraint.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=".home">

<TextView android:id="@+id/textView"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="HOME"
tools:layout_editor_absoluteX="163dp"
tools:layout_editor_absoluteY="40dp" />

</android.support.constraint.ConstraintLayout>
```

#### **Activity\_Main.xml**

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

<android.support.constraint.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">

<Button android:id="@+id/btn1"
android:layout_width="100dp"
android:layout_height="51dp"
android:layout_marginTop="24dp"
android:onClick="register"
```

```
android:text="Register"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/btn2" />

<Button
android:id="@+id/btn2"
android:layout_width="79dp"
android:layout_height="wrap_content"
android:layout_marginTop="24dp"
android:layout_marginBottom="24dp"
android:onClick="login"
android:text="Login"
app:layout_constraintBottom_toTopOf="@+id/btn1"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/edpass" />

<EditText
android:id="@+id/eduname"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_marginTop="24dp"
android:ems="10"
android:hint="username"
android:inputType="textPersonName"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />

<EditText
android:id="@+id/edpass"
android:layout_width="0dp"
android:layout_height="wrap_content"
```

```
android:layout_marginTop="24dp"
android:ems="10"
android:hint="password"
android:inputType="textPersonName"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/eduname" />

</android.support.constraint.ConstraintLayout>
```

### **activity\_register.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.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=".register">

<EditText
android:id="@+id/edtxt1"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_marginTop="24dp"
android:layout_marginBottom="24dp"
android:ems="10"
android:hint="Name"
android:inputType="textPersonName"
app:layout_constraintBottom_toTopOf="@+id/edtxt2"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />

<EditText
```



```
android:id="@+id/edtxt2"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_marginTop="24dp"
android:layout_marginBottom="24dp"
android:ems="10"
android:hint="Address"
android:inputType="textPersonName"
app:layout_constraintBottom_toTopOf="@+id/edtxt3"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/edtxt1" />
```

```
<EditText
android:id="@+id/edtxt3"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_marginBottom="24dp"
android:ems="10" android:hint="email"
android:inputType="textPersonName"
app:layout_constraintBottom_toTopOf="@+id/edtxt4"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent" />
```

```
<EditText
android:id="@+id/edtxt4"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_marginTop="24dp"
android:ems="10" android:hint="phone no"
android:inputType="textPersonName"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/edtxt3" />
```

```
</android.support.constraint.ConstraintLayout>
```

**home.java**

```
package com.example.sjcet.constlayout;
```

```
import
```

```
android.support.v7.app.AppCompatActivity;
```

```
import android.os.Bundle;
```

```
public class home extends AppCompatActivity {
```

```
    @Override
```

```
    protected void onCreate(Bundle
```

```
        savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
```

```
        setContentView(R.layout.activity_home);
```

```
    }
```

```
}
```

**Main\_Activity.java**

```
package com.example.sjcet.constlayout;
```

```
import android.content.Intent;
```

```
import
```

```
android.support.v7.app.AppCompatActivity;
```

```
import android.os.Bundle;
```

```
import android.view.View;
```

```
import
```

```
android.widget.EditText;
```

```
import android.widget.Toast;
```

```
public class MainActivity extends AppCompatActivity {
```

```
    @Override
```

```
    protected void onCreate(Bundle
```

```
        savedInstanceState) {
```

```
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
}

public void register(View view) {
    Intent i = new Intent(MainActivity.this,
        register.class);startActivity(i);
}

public void login(View view) {
    EditText E1, E2;
    E1 =(EditText) findViewById(R.id.eduname);
    E2 = (EditText) findViewById(R.id.edpass);

    if((E1.getText().toString().equals("admin")) && (E2.getText().toString().equals("admin")))
    {
        Intent i = new
        Intent(MainActivity.this,home.class);
        startActivity(i);
    }

    else
    {
        Toast.makeText(this, "Invalid username or password", Toast.LENGTH_SHORT).show();
    }

}
}
```

**Register.java**

```
package com.example.sjcet.loginvali;

import
    android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
```

```
import android.view.View;
import
android.widget.EditText;
import android.widget.Toast;

public class register extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle
savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_register);
    }

    public void rgstr(View
view) {EditText
E1,E2,E3,E4,E5;
E1 = (EditText) findViewById(R.id.edtxt1);
E2 = (EditText) findViewById(R.id.edtxt2);
E3 = (EditText) findViewById(R.id.edtxt3);
E4 = (EditText) findViewById(R.id.edtxt4);
E5 = (EditText) findViewById(R.id.edtxt5);
String MobilePattern = "[0-9]{10}";

    if(E1.length() == 0) {
        Toast.makeText(this, "Enter name", Toast.LENGTH_SHORT).show();
    }

    else if(E2.length() == 0) {
        Toast.makeText(this, "Enter Address", Toast.LENGTH_SHORT).show();
    }

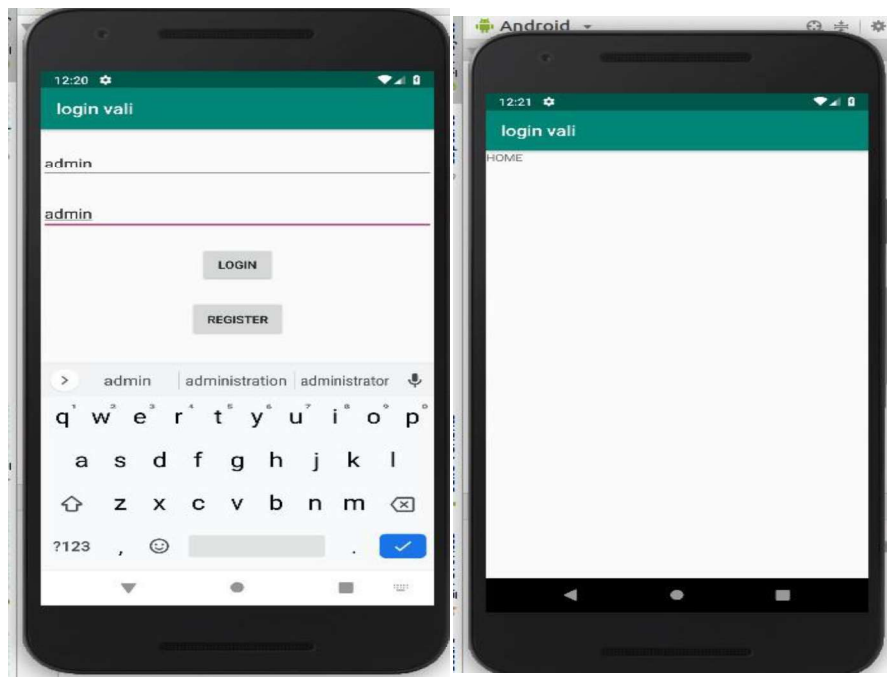
    else if(E3.length() == 0) {
        Toast.makeText(this, "Enter Email", Toast.LENGTH_SHORT).show();
```

```
}

else if(E4.length() == 0) {
    Toast.makeText(this, "Enter phone no", Toast.LENGTH_SHORT).show();
}
else if((E4.length() != 10) && (!E5.getText().toString().matches(MobilePattern))
) {Toast.makeText(this, "enter valid phone number",
    Toast.LENGTH_SHORT).show();
}

else if(E5.length() == 0) {
    Toast.makeText(this, "Enter valid password", Toast.LENGTH_SHORT).show();
}
else if(E5.length() < 8) {
    Toast.makeText(this, "Password should be minimum 8 characters",
    Toast.LENGTH_SHORT).show();
}
else{
    Toast.makeText(this, "resgistered successfully", Toast.LENGTH_SHORT).show();
}

}
}
```

**OUTPUT**

## 11. List view

### PROGRAM

#### **Main\_activity.java**

```
package com.example.sjcet.listview;

import

android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import

android.widget.ArrayAdapter;

import android.widget.ListView;

public class MainActivity extends AppCompatActivity {

    ListView lv;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        lv=(ListView)findViewById(R.id.lv);

        String[] courses={"MCA","MBA","BBA","BCA"};

        ArrayAdapter adapter = new

        ArrayAdapter(this,android.R.layout.simple_list_item_1,courses);

        lv.setAdapter(adapter);

    }

}
```

#### **Activity\_Main.xml**

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

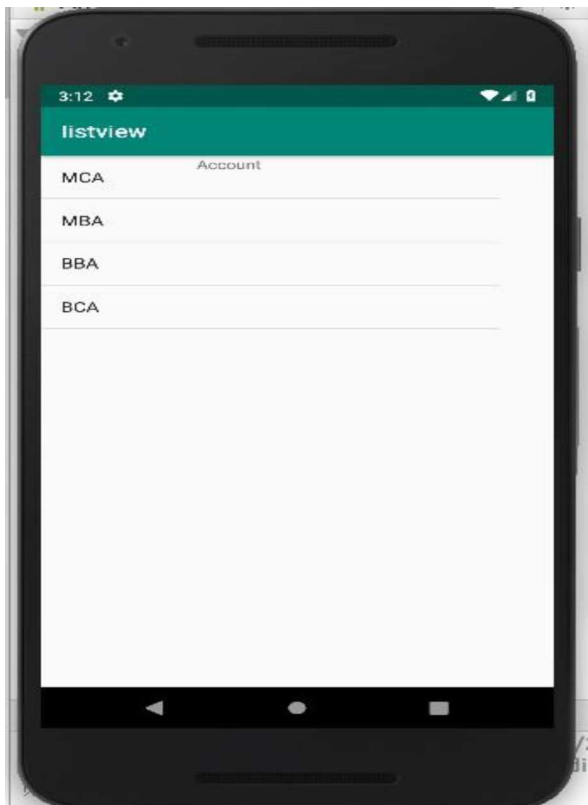
<android.support.constraint.ConstraintLayout
```

```
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:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
<TextView
    android:id="@+id/textView"
    android:layout_width="162dp"
    android:layout_height="47dp"
    android:layout_marginStart="8dp"
    android:layout_marginLeft="8dp"
    android:layout_marginEnd="8dp"
    android:layout_marginRight="8dp"
    android:text="Account"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    tools:layout_editor_absoluteY="64dp" />
<ListView
```



```
android:id="@+id/lv"  
android:layout_width="368dp"  
android:layout_height="321dp"  
tools:layout_editor_absoluteX="8dp"  
tools:layout_editor_absoluteY="131dp"  
"/>  
</android.support.constraint.ConstraintLayout>
```

## OUTPUT



## 12. List View using Toast

### PROGRAM

#### Activity\_Main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.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:id="@+id/textView2"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent" />
<TextView
android:id="@+id/tv"
android:layout_width="162dp"
android:layout_height="47dp"
android:layout_marginStart="8dp"
android:layout_marginLeft="8dp"
android:layout_marginEnd="8dp"
android:layout_marginRight="8dp"
android:text="Account"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
tools:layout_editor_absoluteY="64dp" />
<ListView android:id="@+id/lv"
```

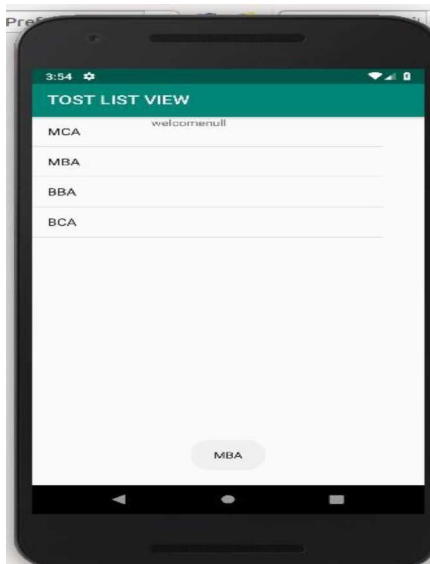
```
android:layout_width="368dp"
android:layout_height="321dp"
tools:layout_editor_absoluteX="8dp"
tools:layout_editor_absoluteY="131dp" />
</android.support.constraint.ConstraintLayout>
```

## Main\_Activity.java

```
package
com.example.sjcet.tostlistview;
import android.content.Intent;
import android.net.Uri;
import
android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.Menu;
import
android.view.MenuItem;
import android.view.View;
import android.widget.AdapterView;
import
android.widget.AdapterView.OnItemClickListener;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.TextView;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity implements
AdapterView.OnItemClickListener {
TextView tv;
ListView lv;
@Override
protected void onCreate(Bundle
savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
tv=(TextView)findViewById(R.id.tv);
```

```
String msg=getIntent().getStringExtra("mykey");// receiving the data
tv.setText("welcome"+msg);
lv=(ListView)findViewById(R.id.lv);// display(welcom changing to admin)
// listview operation
String[] courses={"MCA","MBA","BBA","BCA"};
ArrayAdapter adapter = new
ArrayAdapter(this,android.R.layout.simple_list_item_1,courses);
lv.setAdapter(adapter);
// attach listener
lv.setOnItemClickListener(this);//implement the method by alt+enter
}
@Override
public void onItemClick(AdapterView<?> adapterView, View view, int i, long
l) {String itemname=lv.getItemAtPosition(i).toString();
Toast.makeText(this,itemname,Toast.LENGTH_SHORT).show();
}
}
```

## OUTPUT



### 13. Grid view

#### **PROGRAM**

##### **Activity\_main.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:tools="http://schemas.android.com/tools"
xmlns:app="http://schemas.android.com/apk/res-auto"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".MainActivity">
<GridView
android:id="@+id/gv"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:columnWidth="100dp"
android:minHeight="100dp"
android:numColumns="auto_fit"
android:stretchMode="columnWidth"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent" />
</android.support.constraint.ConstraintLayout>
```

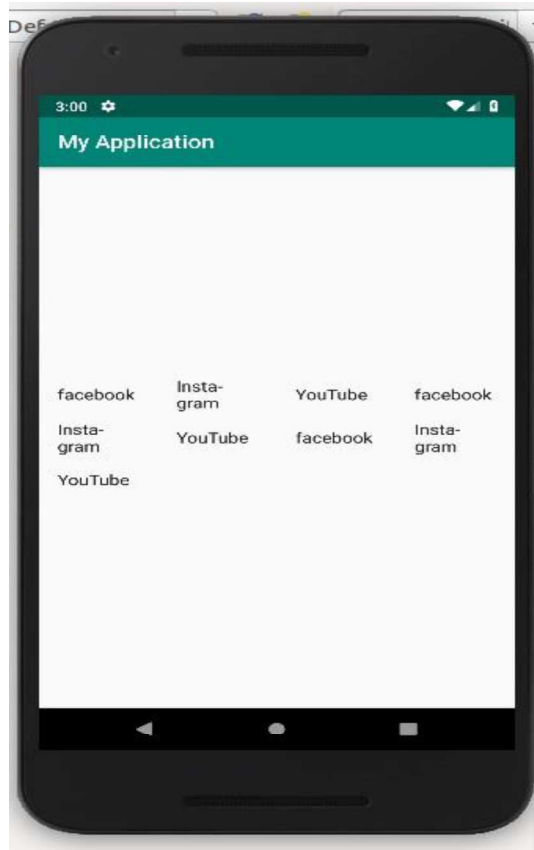
##### **Main\_Activity.java**

```
package com.example.sjcet.myapplication;

import
android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
```



## OUTPUT



## 14. Option menu

### **PROGRAM**

#### **Activity\_Main.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.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!"
android:id="@+id/tv"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent" />
</android.support.constraint.ConstraintLayout>
```

#### **Main\_Activity.java**

```
package com.example.sjcet.contextmenu;
import
android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.Menu;
import
android.view.MenuItem;
import
android.widget.TextView;
```



```
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    TextView tv;

    @Override
    protected void onCreate(Bundle
        savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        tv=(TextView)findViewById(R.id.tv);
        String msg=getIntent().getStringExtra("mykey");// receiving the data
        tv.setText(msg);                                // display(welcom changing to admin)
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        getMenuInflater().inflate(R.menu.main_menu,menu);
        //connecting menu
        return true;
        // changing to true
    }

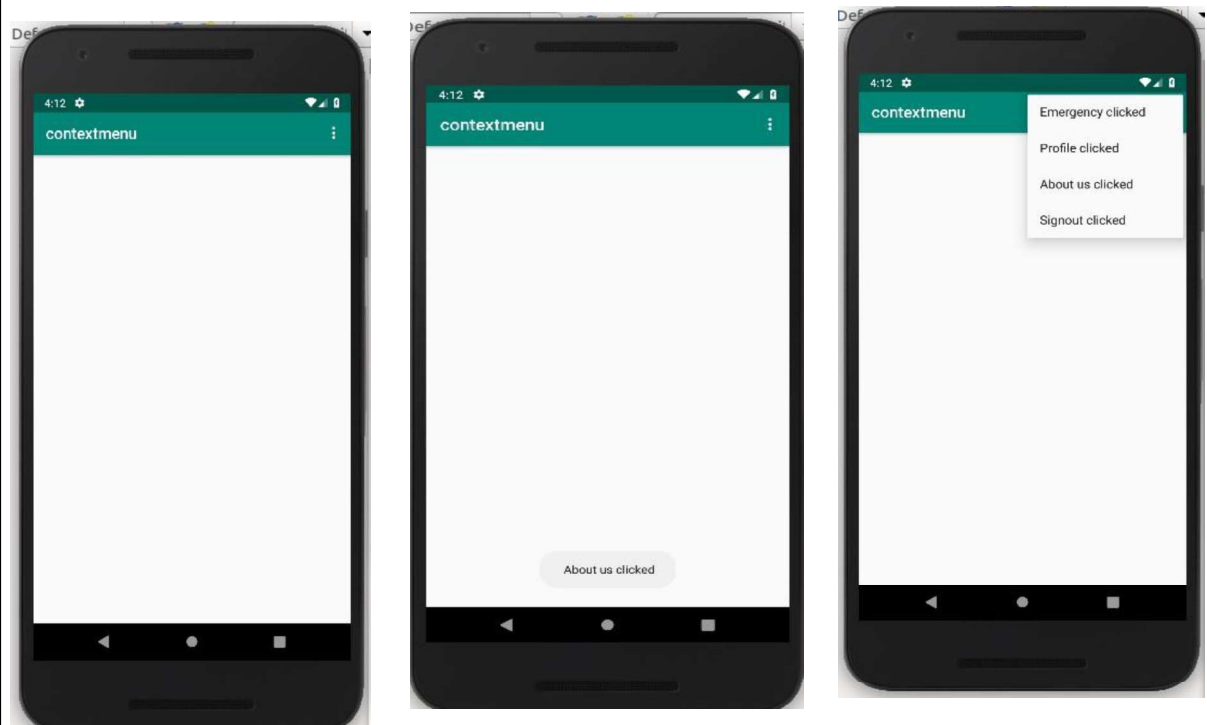
    @Override
    public boolean onOptionsItemSelected(MenuItem
        item) {switch (item.getItemId()) {
        case R.id.emergency: // full colon
            Toast.makeText(this," Emergency
            clicked",Toast.LENGTH_SHORT).show();break;
        case R.id.profile:
            Toast.makeText(this," Profile
            clicked",Toast.LENGTH_SHORT).show();break;
        case R.id.aboutus:
            Toast.makeText(this," About us clicked",Toast.LENGTH_SHORT).show();
            break;
        case R.id.signout:
            Toast.makeText(this," Signout
            clicked",Toast.LENGTH_SHORT).show();break;
        }
    }
```

```
return true; // changing to true
}
}
```

### **Main\_Menu.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">
<item
android:id="@+id/emergency"
android:title="Emergency
clicked"/>
<item
android:id="@+id/profile"
android:title="Profile
clicked"/>
<item

android:id="@+id/aboutus"
android:title="About us
clicked"/>
<item
android:id="@+id/signout"
android:title="Signout
clicked"/>
</menu>
```

**OUTPUT**

## 15. Context menu

### **PROGRAM**

#### **Activity\_Main.Xml**

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.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:id="@+id/text_view"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Click Here"
android:textSize="30dp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent" />
</android.support.constraint.ConstraintLayout>
```

#### **Main\_Actiity.Java**

```
package com.example.sjcet.contextmenu;
import
android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.ContextMenu;
import android.view.MenuItem;
import android.view.View;
import
android.widget.TextView;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
```

```
@Override
protected void onCreate(Bundle
savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    TextView
    textView=findViewById(R.id.text_view);
    registerForContextMenu(textView);
}

@Override
public void onCreateContextMenu(ContextMenu menu, View v,
    ContextMenu.ContextMenuInfo menuInfo) {
    super.onCreateContextMenu(menu, v, menuInfo);
    getMenuInflater().inflate(R.menu.main_menu,menu);
}

@Override
public boolean onContextItemSelected(MenuItem
item) {switch (item.getItemId()){
    case R.id.Emergency:
        Toast.makeText(this,"Emergency
Clicked",Toast.LENGTH_SHORT).show();break;
    case R.id.profile:
        Toast.makeText(this,"Profile
Clicked",Toast.LENGTH_SHORT).show();break;
    case R.id.aboutus:
        Toast.makeText(this,"About Us
Clicked",Toast.LENGTH_SHORT).show();break;
    case R.id.signout:
        Toast.makeText(this,"Signout
Clicked",Toast.LENGTH_SHORT).show();break;
    default:
    }
    return super.onContextItemSelected(item);
}
```

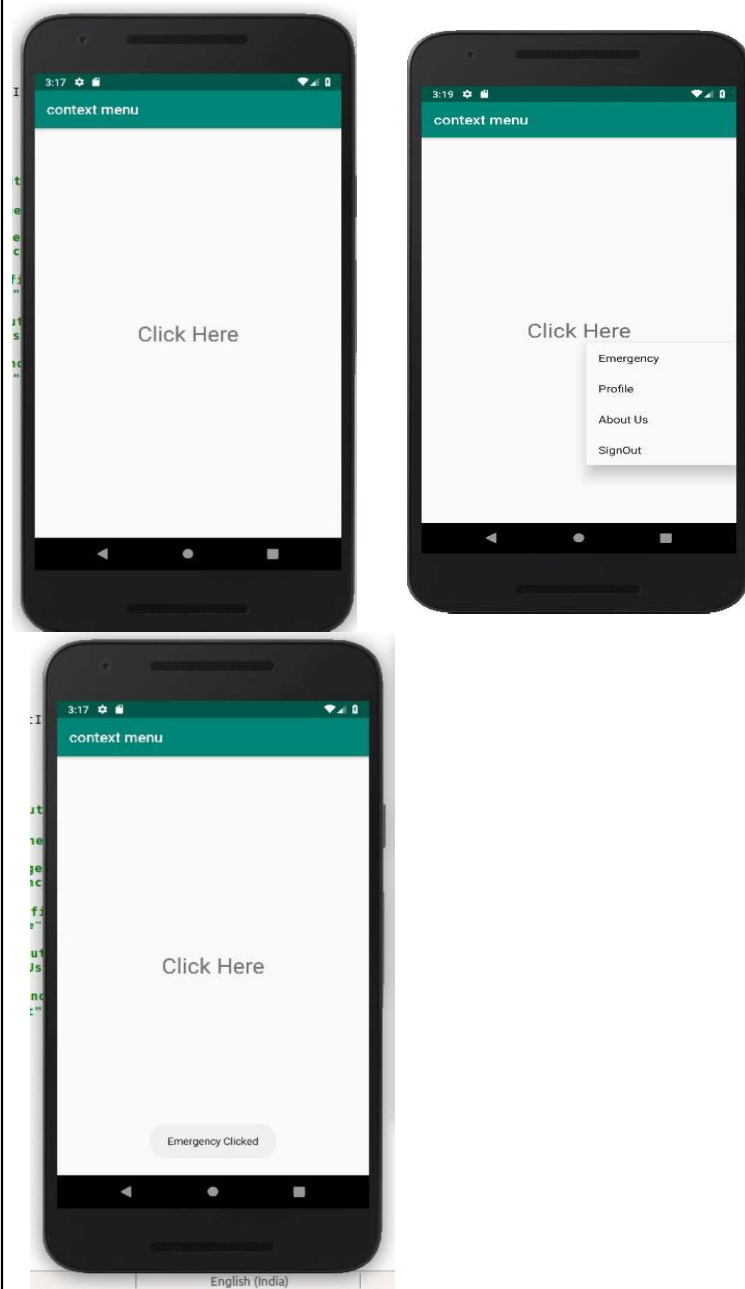
```
}
```

### **Main\_Menu.Xml**

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

<menu xmlns:android="http://schemas.android.com/apk/res/android">
<item
    android:id="@+id/Emergency"
    "android:title="Emergency"
/>
<item
    android:id="@+id/profile"
    android:title="Profile"
/>
<item
    android:id="@+id/aboutus"
    android:title="About Us"
/>
<item
    android:id="@+id/signout"
    android:title="SignOut"
/>
</menu>
```

## OUTPUT



## 16. Develop an application as a micro project which users SQL database

### Activity Main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.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/ed1"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_marginStart="8dp"
android:layout_marginLeft="8dp"
android:layout_marginTop="8dp"
android:ems="10" android:hint="name"
android:inputType="textPersonName"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />
<EditText
android:id="@+id/ed2"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_marginStart="8dp"
android:layout_marginLeft="8dp"
android:layout_marginTop="36dp"
android:ems="10"
android:hint="Surname"
android:inputType="textPersonName"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/ed1"
```



```
</>

<EditText
    android:id="@+id/ed3"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="8dp"
    android:layout_marginLeft="8dp"
    android:layout_marginTop="28dp"
    android:ems="10"
    android:hint="marks"
    android:inputType="textPersonName"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/ed2"
/>

<Button
    android:id="@+id/butt
on"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="19dp"
    android:onClick="SaveDat"
    android:text="Insert"

    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/ed3"
    "tools:ignore="OnClick" />

<Button
    android:id="@+id/button2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="96dp"
    android:layout_marginLeft="96dp"
    android:layout_marginTop="19dp"
    android:onClick="read"
    android:text="Read"
```

```
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/ed3"
"tools:ignore="OnClick" />
<TextView
android:id="@+id/textView"
android:layout_width="match_pare
nt"android:layout_height="207dp"
android:layout_marginTop="20dp"
android:hint="data"
app:layout_constraintTop_toBottomOf="@+id/button" />
<Button
android:id="@+id/button3"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginStart="192dp"
android:layout_marginLeft="192dp"
android:layout_marginTop="19dp"
android:onClick="update"
android:text="update"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/ed3"
"tools:ignore="OnClick" />
<Button
android:id="@+id/button4"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginStart="288dp"
android:layout_marginLeft="288dp"
android:layout_marginTop="19dp"
android:onClick="delete" android:text="delete"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/ed3"
"tools:ignore="OnClick" />
</android.support.constraint.ConstraintLayout>
```

**Main\_Activity.java**

```
package
com.example.sjcet.databasepgm;
import android.content.ContentValues;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import
android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import
android.widget.EditText;
import
android.widget.TextView;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
    EditText Name,Mark,Surname;
    TextView DataV;
    MyDatabase database = new
    MyDatabase(this) ;@Override
    protected void onCreate(Bundle
    savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_mai
        n);Name = findViewById(R.id.ed1);
        Surname = findViewById(R.id.ed2);
        Mark = findViewById(R.id.ed3);
        DataV = findViewById(R.id.textView);
    }
    public void SaveDat(View view) {
        String UserVal = Name.getText().toString();
        String SurnameVal = Surname.getText().toString();
        Integer PassVal = Integer.parseInt(Mark.getText().toString());
```

```
Boolean result = database.insertdata(UserVal,
PassVal,SurnameVal);if (result == true) {
Toast.makeText(getApplicationContext(), "Data inserted
Sucessfully",Toast.LENGTH_SHORT).show();
} else {
Toast.makeText(getApplicationContext(), "Data inserted
failed",Toast.LENGTH_SHORT).show();
}
}

public void read(View view) {
Cursor res =
database.getAllData();
StringBuffer stringBuffer = new
StringBuffer();if (res != null &&
res.getCount() > 0) {
while (res.moveToNext()) { stringBuffer.append("Id: " + res.getString(0) + "\n");
stringBuffer.append("Name: " + res.getString(1) + "\n");
stringBuffer.append("Surname: " + res.getString(2) + "\n");
stringBuffer.append("marks: " + res.getString(3) + "\n");
}
DataV .setText(stringBuffer.toString());
} else {
Toast.makeText(getApplicationContext(), "Data Retrieved
Successfully",Toast.LENGTH_SHORT).show();
}
Toast.makeText(getApplicationContext(), "Data Retrieved
Successfully",Toast.LENGTH_SHORT).show();
}

public void update(View view) {
String UserVal = Name.getText().toString();
String SurnameVal = Surname.getText().toString();
Integer PassVal = Integer.parseInt(Mark.getText().toString());
Boolean result = database.updateData(UserVal, PassVal,
SurnameVal);if (result==true){
Toast.makeText(getApplicationContext(), "Data updated
```

```
Successfully",Toast.LENGTH_SHORT).show();
}
else {
    Toast.makeText(getApplicationContext(), "No Rows
    Affected",Toast.LENGTH_SHORT).show();
}
}
public void delete(View view) {
    String UserVal =
    Name.getText().toString();int
    result=database.deletedata(UserVal);
    Toast.makeText(getApplicationContext(), "Rows
    Affected",Toast.LENGTH_SHORT).show();
}
}
```

### **MyDatabase.java**

```
package
com.example.sjcet.databasepgm;
import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import
android.database.sqlite.SQLiteOpenHelper;
import android.view.View;

public class MyDatabase extends
SQLiteOpenHelper {public MyDatabase(Context
context) {
    super(context, "Login.db", null, 1);
}
@Override
public void onCreate(SQLiteDatabase db) {
    db.execSQL("Create table USERS(ID INTEGER PRIMARY KEY
```

```
AUTOINCREMENT,NAME text,SURNAME text,MARKS INTEGER)");
}
@Override
public void onUpgrade(SQLiteDatabase db, int oldVersion, int
newVersion) {db.execSQL("DROP TABLE IF EXISTS USERS");
}
public Cursor getAllData() {
SQLiteDatabase db=this.getWritableDatabase();
Cursor res = db.rawQuery("Select * from USERS",null);return res;
}
public Boolean insertdata(String userVal, Integer passVal, String
surnameVal) {SQLiteDatabase db = this.getWritableDatabase();
ContentValues contentValues = new ContentValues();
contentValues.put("NAME", userVal);
contentValues.put("SURNAME", surnameVal);
contentValues.put("MARKS", passVal);
long result = db.insert("USERS", null,
contentValues);db.close();
if (result == -1) {
return false;
} else {
return
true;
}
}
public int deletedata(String userVal) {
SQLiteDatabase
db=this.getWritableDatabase();
int i =db.delete("USERS","NAME=?",new
String[]{userVal});return i;
}
public Boolean updateData(String userVal, Integer passVal, String
surnameVal) {SQLiteDatabase db=this.getWritableDatabase();
ContentValues contentValues=new
```

```
ContentValues();
contentValues.put("NAME",userVal);
contentValues.put("SURNAME",surnameVal);
contentValues.put("MARKS",passVal);
int result=db.update("USERS",contentValues,"NAME=?",new
String[]{userVal});if (result>0) {
return true;
}
else
{
return false;
}
}
}
```

## OUTPUT

