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:

ARDRA P DAS (SJC21MCA-2009)

MASTER OF COMPUTER APPLICATIONS

ST.JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY,

PALAI ,CHOONDACHERRY P.O, KOTTAYAM, KERALA

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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 **Ardra P Das** 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 her 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   **Mr. Anish Augustine**
Faculty In- Charge   **(HoD In Charge-MCA)**

Submitted for the End Semester Examination held on:

Examiner 1:

Examiner 2:

DECLARATION

    I **Ardra P Das**, 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   Ardra P Das

Date :   (SJC21MCA-2009)

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.c

om/apk/res-auto"

xmlns:tools="http://schemas.android.

com/tools"

android:layout_width="match_paren

t"

android:layout_height="match_paren

t" tools:context=".MainActivity">

<LinearLayout

android:layout_widt

h="match_parent"

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

<EditText

android:id="@+id/e

ditText"

android:layout_widt

h="wrap_content"

android:layout_height=

"wrap_content"
```

```
android:ems="10"

android:inputType="tex

tPersonName"

android:text="USERN

AME"

android:textColor="@c

olor/colorAccent"

tools:layout_editor_abs

oluteX="85dp"

tools:layout_editor_abs

oluteY="54dp" />

<EditText

android:id=

"@+id/edit

Text2"
```

```
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>
```

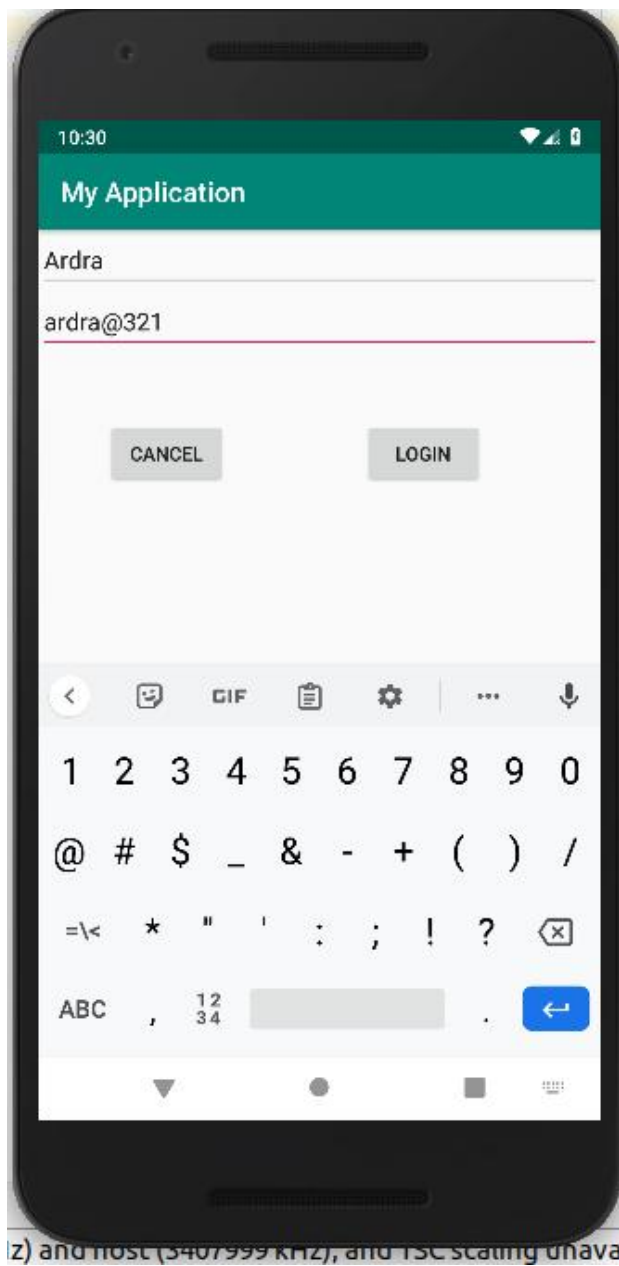**Main_Activity.java**

```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.c
om/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


```
protected void onCreate(Bundle savedInstanceState)
{super.onCreate(savedInstanceState);
```
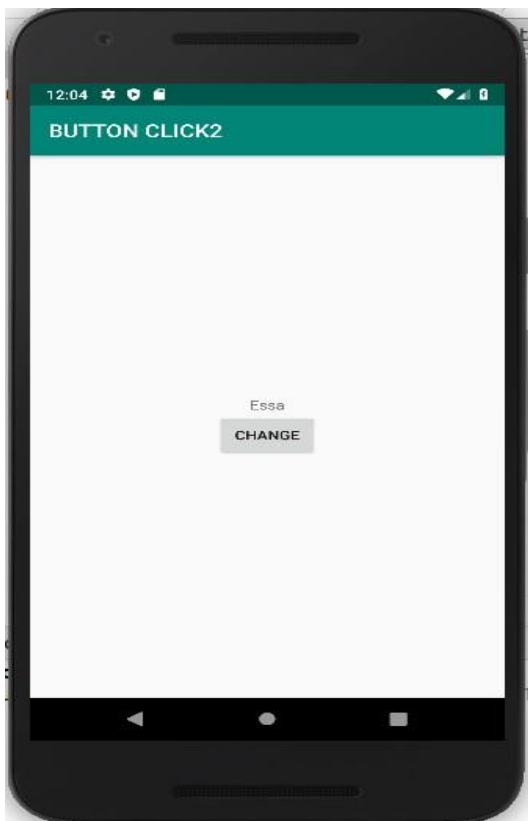
3. Read a value from edit text and print it in a text view

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

```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

package 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
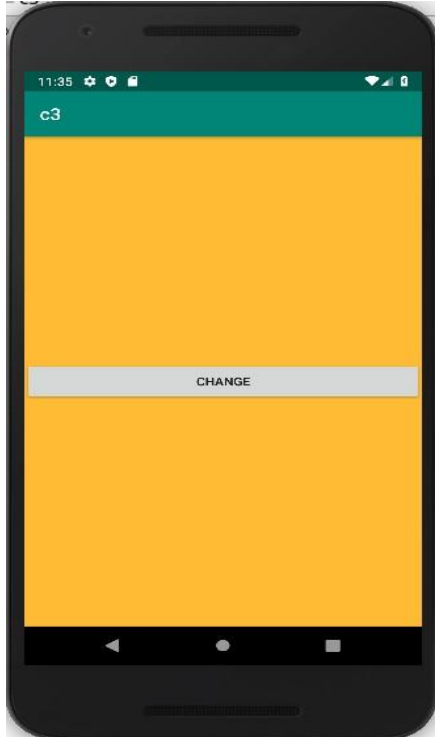
5 create a simple calculator

PROGRAM

Activity_Main.java

```xml
<?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="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" />
```

```xml
<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="80dp"

    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/ed1" />
    </android.support.constraint.ConstraintLayout>
```

Main_Activity.java

```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));
```
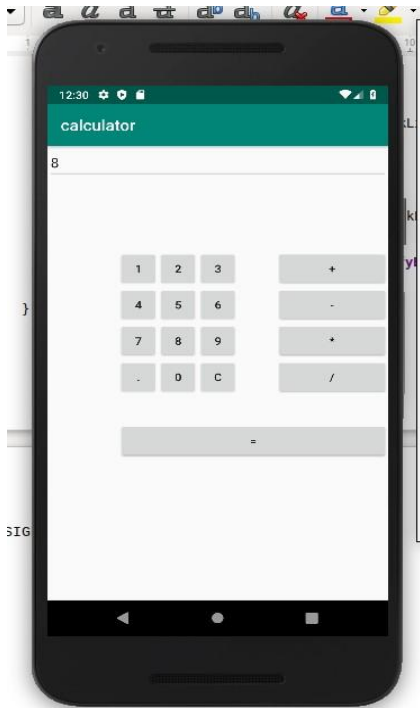
```
}
}
```

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

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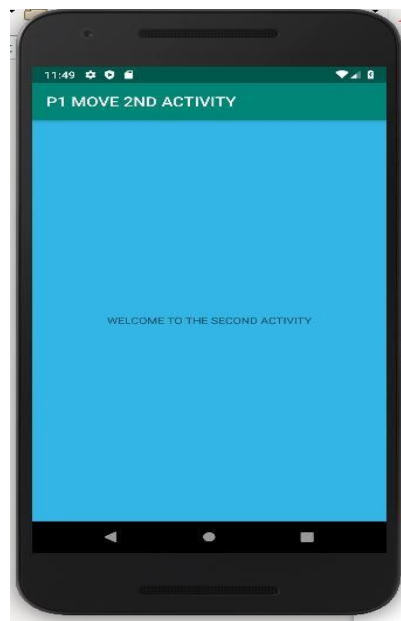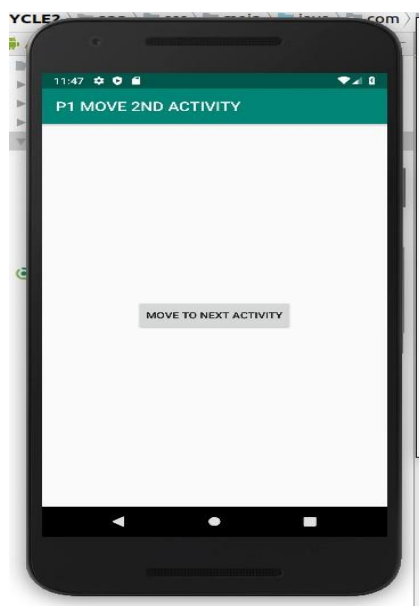
7.Create an activity and move to facebook login page on button click

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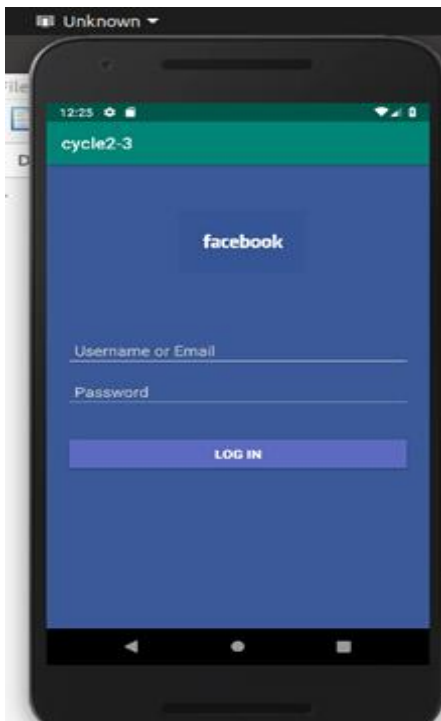
8.Read message in the first activity and pass it to the 2nd activity on a button click

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();
```
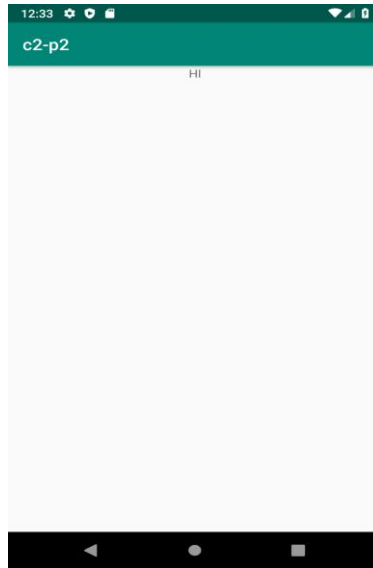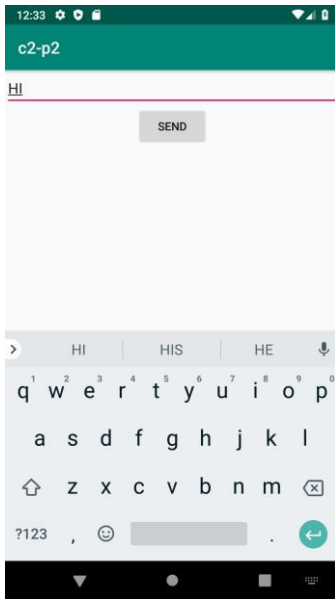
String str = intent.getStringExtra("message_key");

tv.setText(str);

}

OUTPUT

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

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

PROGRAM

Activity_Main.xml

```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"
```

```xml
        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

```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 data
editor.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
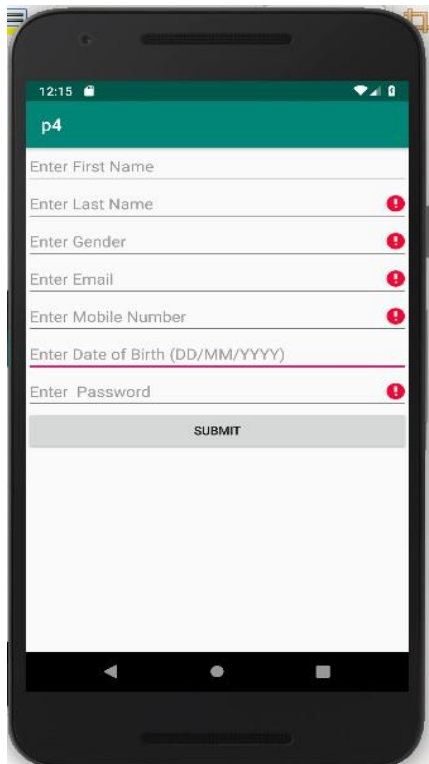
10. login and registration

PROGRAM

Activity_home.xml

```xml
<?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
<?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"
```

```xml
    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"
```

```xml
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

```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

```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();
}


}
```
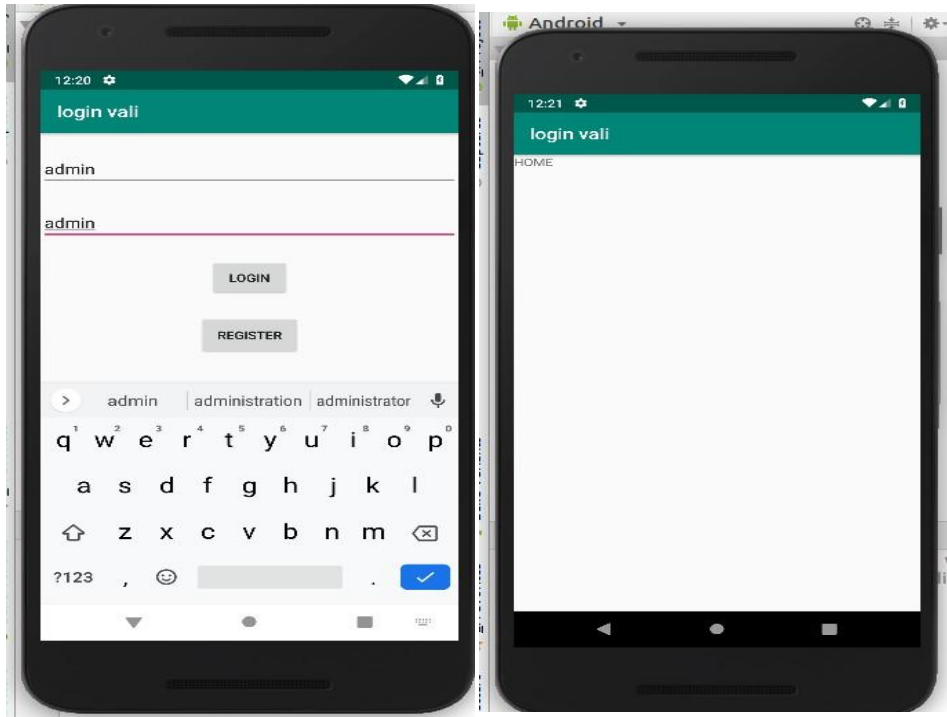
}

OUTPUT

11.List view

PROGRAM

Main_activity.java

```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.ConstraintLayolistut>

OUTPUT
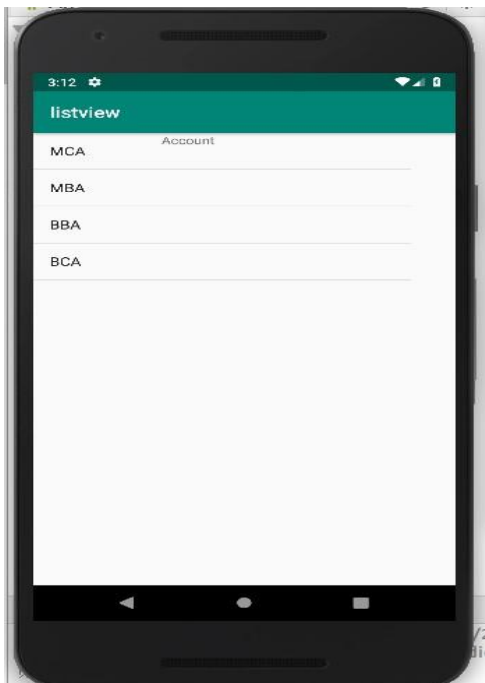
12.List View using Toast

<u>PROGRAM</u>

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" />

```xml
<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

```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;

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)*

// listvivew 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();

}

}

Mobile Application Development Lab

OUTPUT
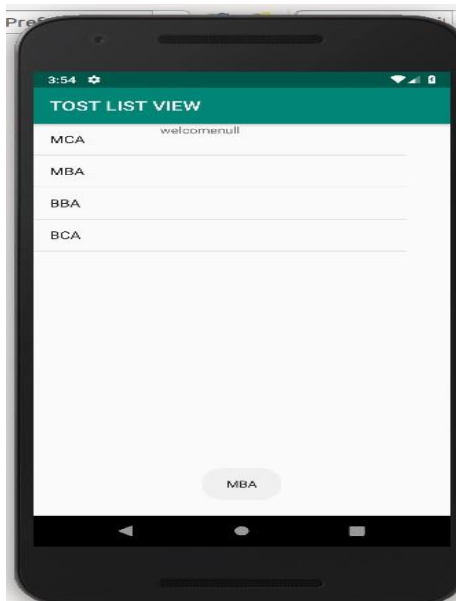
13. Grid view

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;

import android.widget.AdapterView;

import android.widget.ArrayAdapter;

import android.widget.GridView;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity implements

AdapterView.OnItemClickListener {

GridView gridView;

static   final   String[]

gridviewvalue={ "facebook","Instag

ram","YouTube",

"facebook","Instagram","YouTube",

"facebook","Instagram","YouTube"

};

@Override

protected void onCreate(Bundle savedInstanceState)

{super.onCreate(savedInstanceState);

setContentView(R.layout.*activity_main*);

gridView=findViewById(R.id.*gv*);

ArrayAdapter adapter = new

ArrayAdapter(this,android.R.layout.*simple_list_item_1*,*gridviewvalue*);

gridView.setAdapter(adapter);

gridView.setOnItemClickListener(this);

}

public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {

String itemname=gridView.getItemAtPosition(i).toString();

Toast.*makeText*(this,itemname,Toast.*LENGTH_SHORT*).show();

}

}

OUTPUT
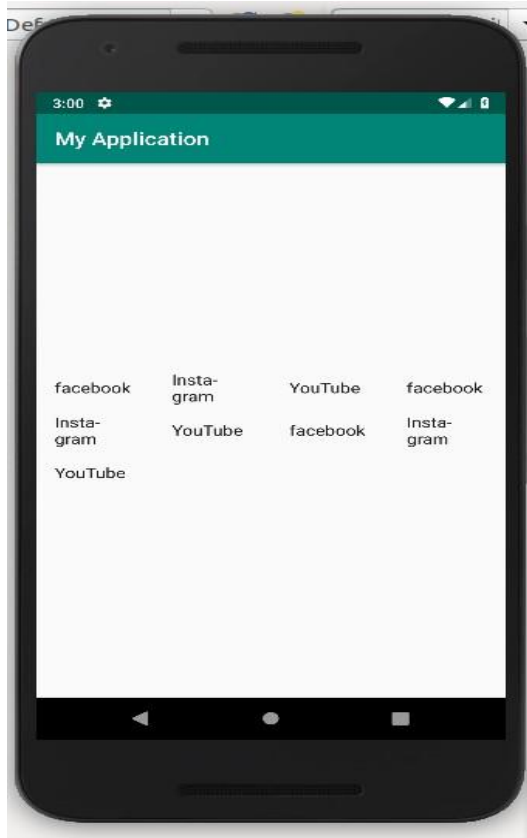
14. Option menu

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) {

```java
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
}
}
```
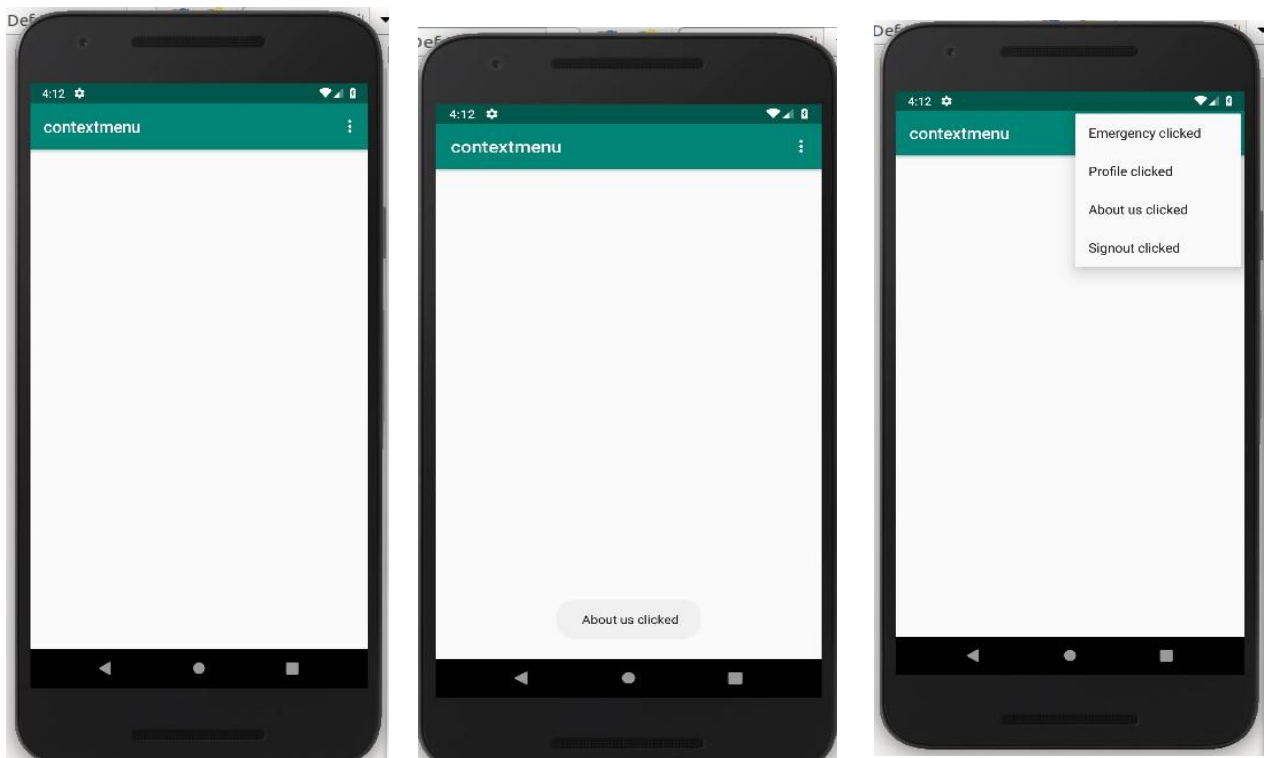
Main_Menu.xml

```xml
<?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
<?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);

}

}
```
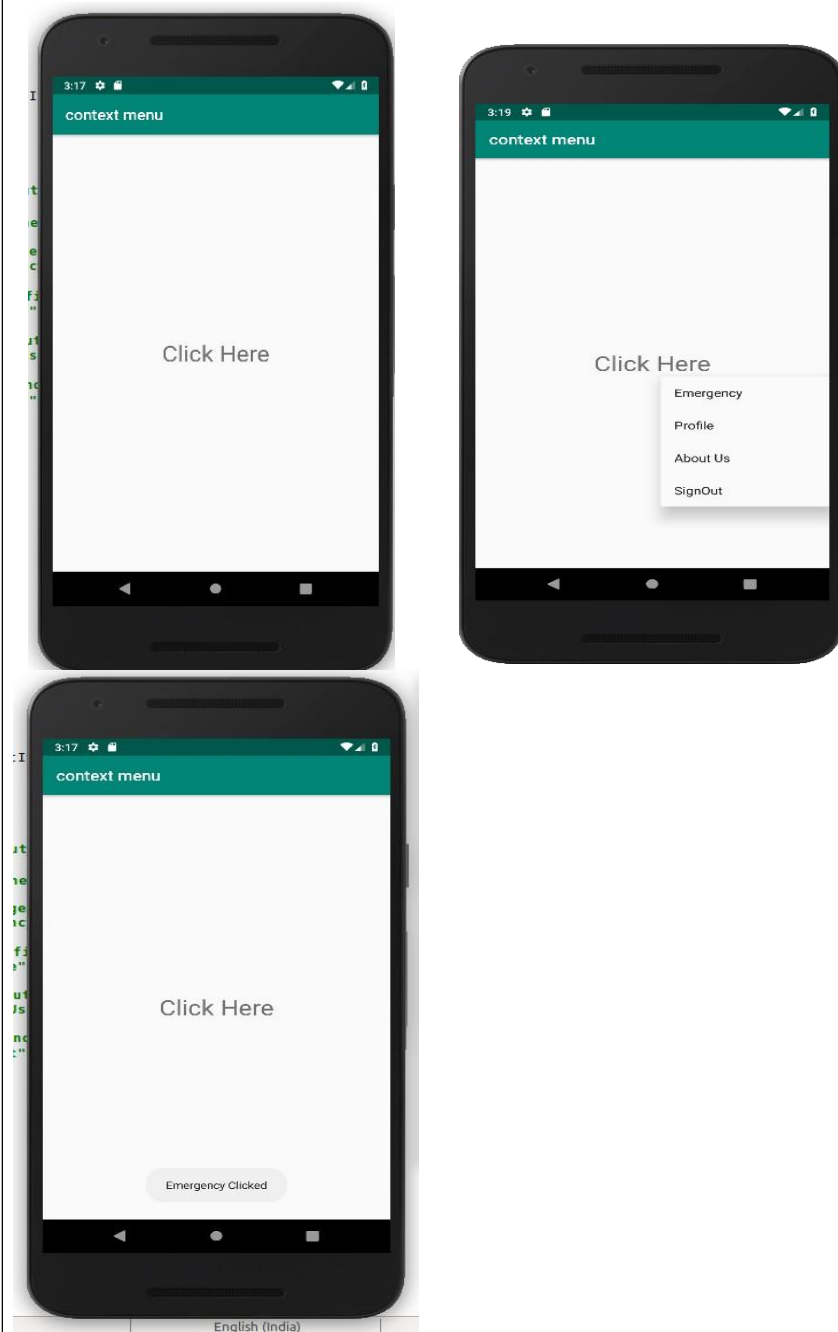
Main_Menu.Xml

```xml
<?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: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="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/button"

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" />
```

```xml
<TextView
android:id="@+id/textView"
android:layout_width="match_parent"
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_Menu.Xml

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_main);

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",

} 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.Xml

```
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