

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;

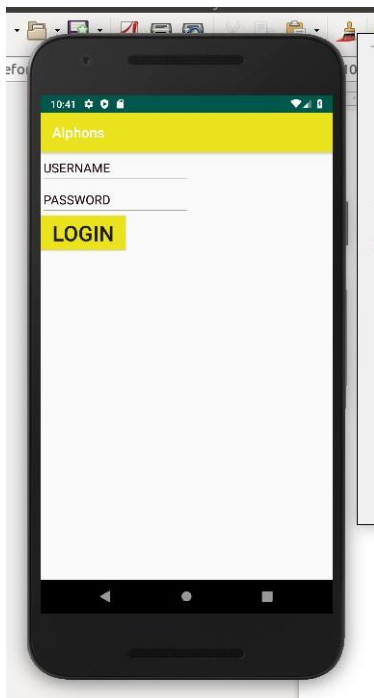
import android.os.Bundle;

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.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



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 background 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 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" />
```

```
<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

```
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);
    }
}
```

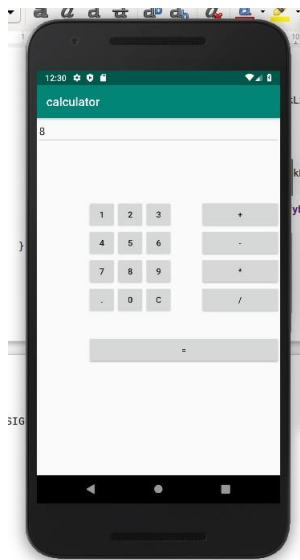
```
public void add(View view) {  
    et1 = (EditText)findViewById(R.id.ed1);  
    et2 = (EditText)findViewById(R.id.ed2);  
    tv1 = (TextView)findViewById(R.id.txt1);  
    String s1 = et1.getText().toString();  
    String s2 = et2.getText().toString();  
    ed1 = Integer.parseInt(s1);  
    ed2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

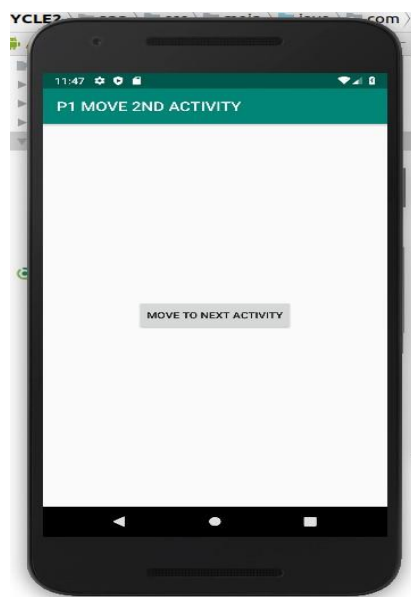
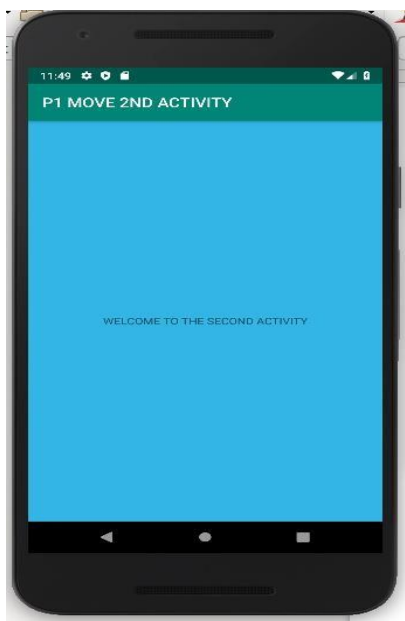
```
package com.example.sjcet.cycle2_1;
```



```
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;

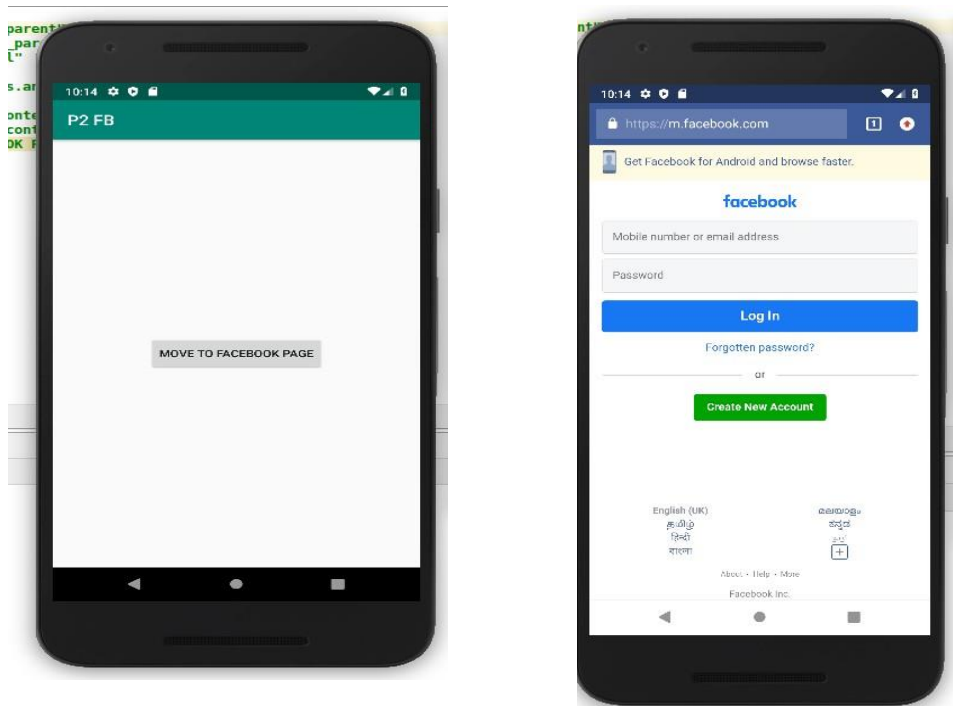
public class MainActivity extends AppCompatActivity {

    @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);

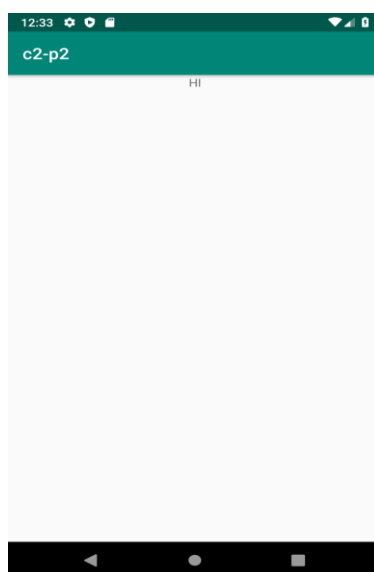
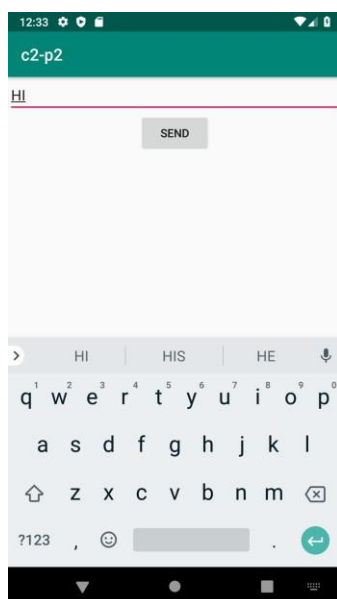
        Intent intent = getIntent();

        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 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

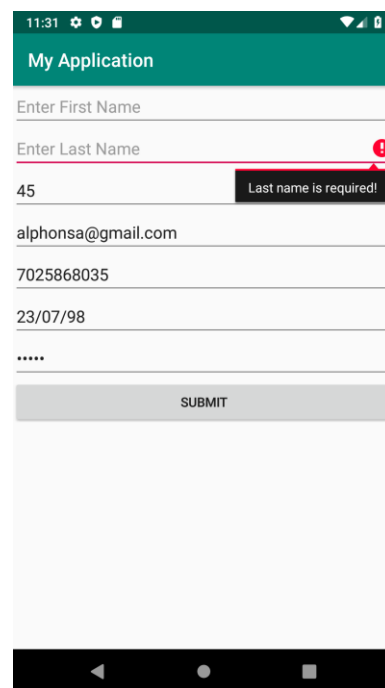
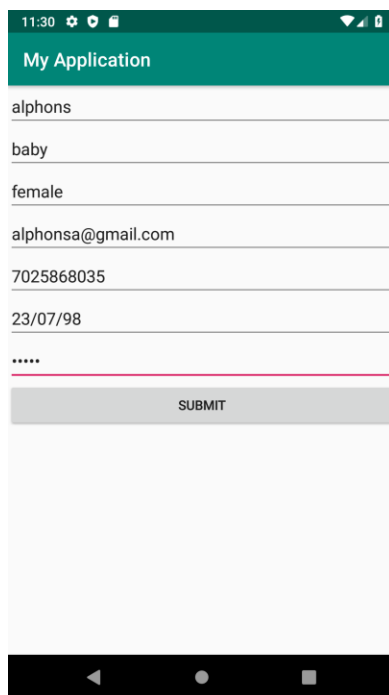
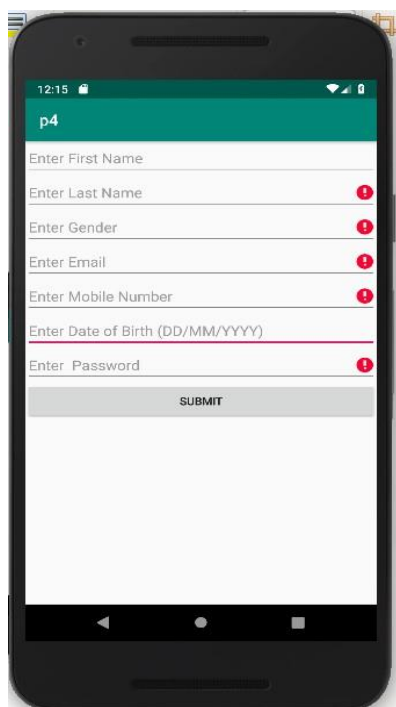
```
import android.content.SharedPreferences;
```

```
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 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/edt3" />
</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();
        }
    }
}
```

```

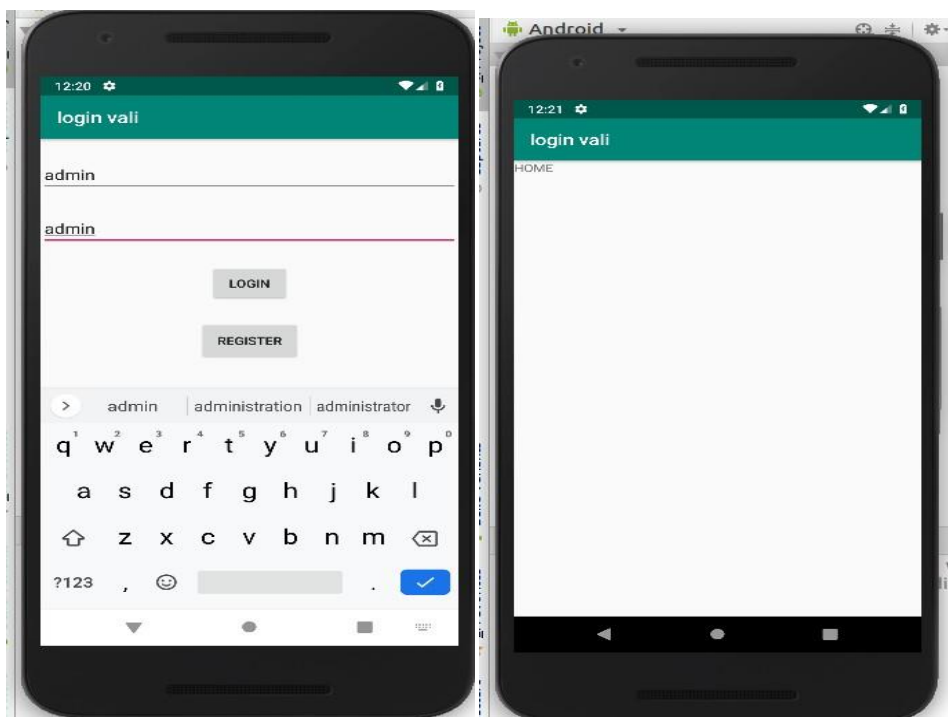
}
else if((E4.length() != 10) && (!E5.getText().toString().matches(MobilePattern)) ) {
    Toast.makeText(this, "enter valid phone number", Toast.LENGTH_SHORT).show();
}

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

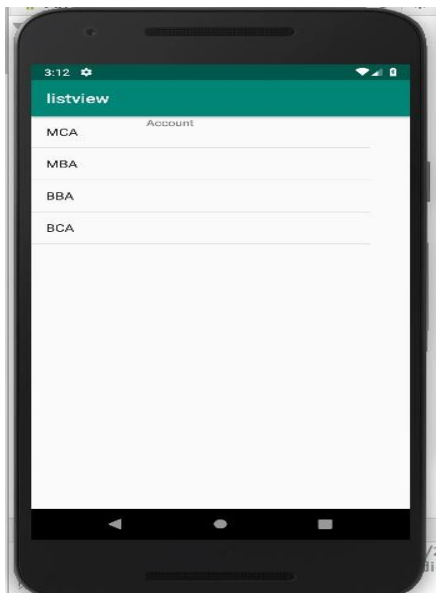
```
<?xml version="1.0" encoding="utf-8"?>

<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
```

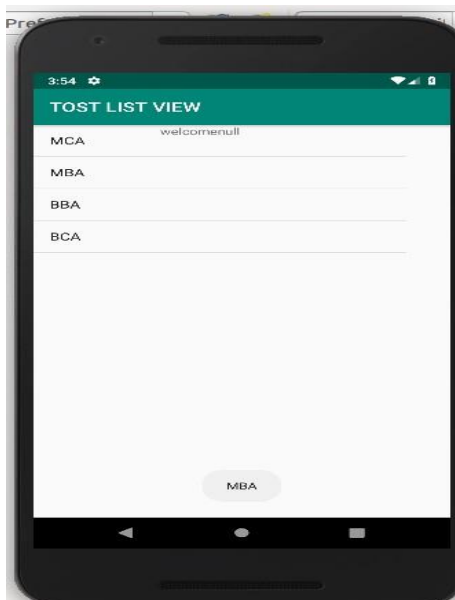
```
android:id="@+id/lv"
android:layout_width="368dp"
android:layout_height="321dp"
tools:layout_editor_absoluteX="8dp"
tools:layout_editor_absoluteY="131dp" />
</android.support.constraint.ConstraintLayout>
```

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;
import android.widget.AdapterView;
```

```
import android.widget.AdapterView;
import android.widget.GridView;
import android.widget.Toast;

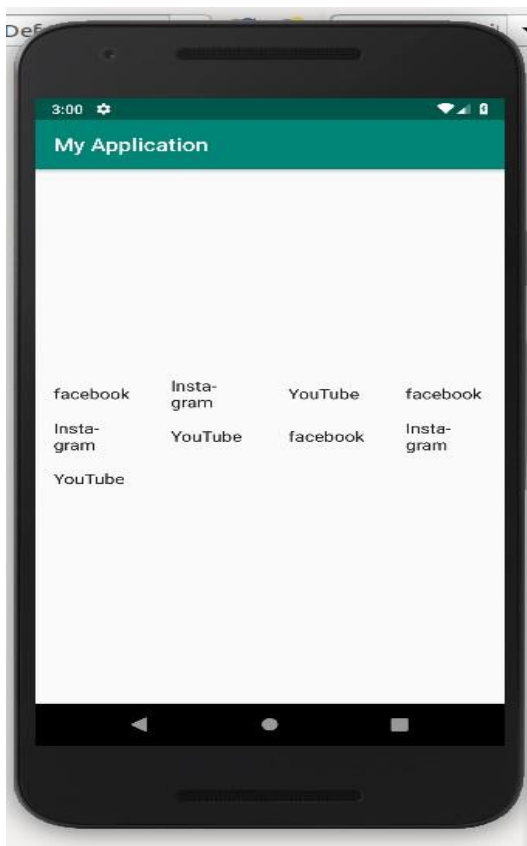
public class MainActivity extends AppCompatActivity implements
AdapterView.OnItemClickListener {
    GridView gridView;

    static final String[] gridViewvalue={
        "facebook","Instagram","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

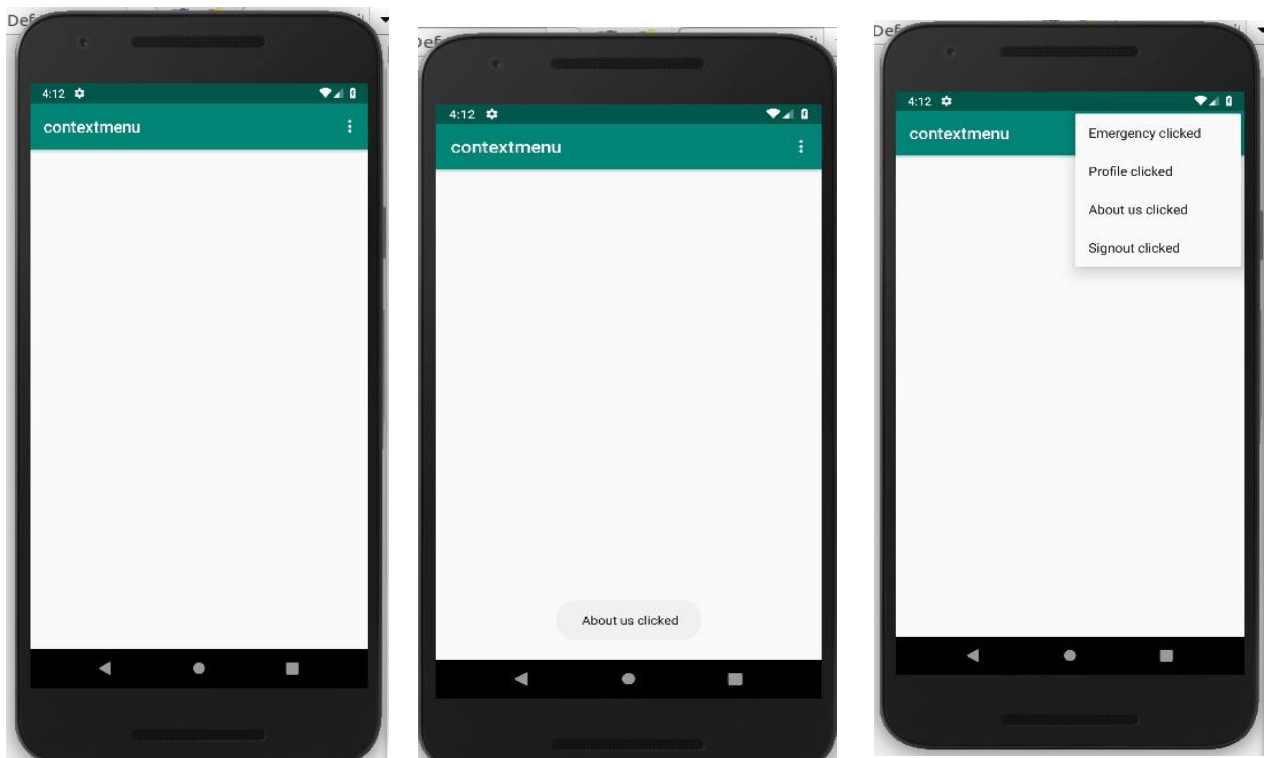
```
package com.example.sjcet.contextmenu;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.widget.TextView;
import android.widget.Toast;
```

```
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) {  
        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);
}

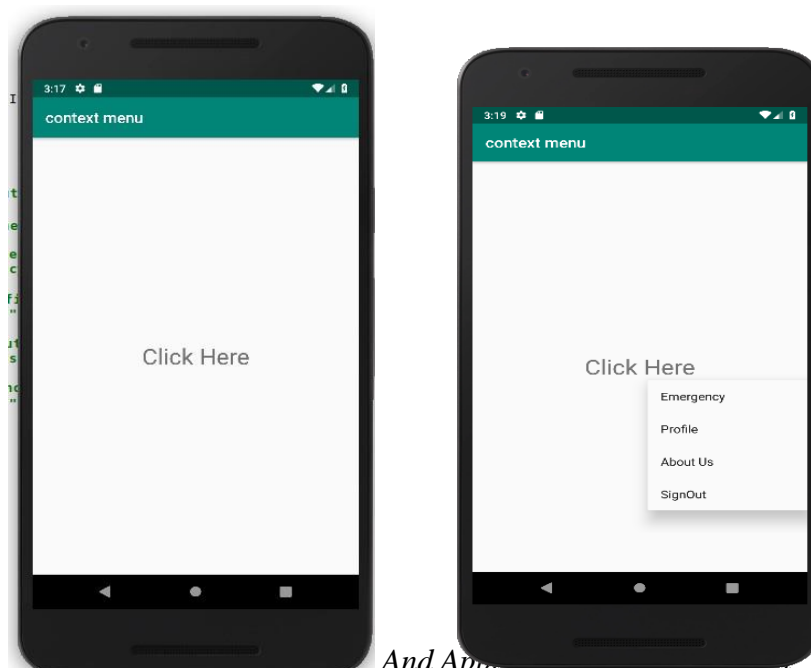
@Override
public boolean onContextItemSelected(MenuItem item) {
    switch (item.getItemId()){
        case R.id.Emergency:
            Toast.makeText(this,"Emergency Clicked",Toast.LENGTH_SHORT).show();
            break;
        case R.id.profile:
            Toast.makeText(this,"Profile Clicked",Toast.LENGTH_SHORT).show();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

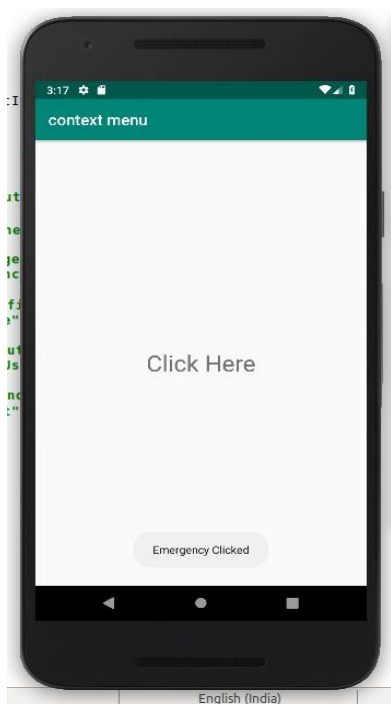
Main_Menu.Xml

```
<?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/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" />
<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.textV);
    }
    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.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

