

1.Design a Login Page

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:hint="USER NAME"/>
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="PASSWORD"
        android:id="@+id/password"/>
    <Button
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="LOGIN"
        android:id="@+id/login"/>
</LinearLayout>
```

Main_Activity.java

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

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

    @Override

    protected void onCreate(Bundle savedInstanceState) {

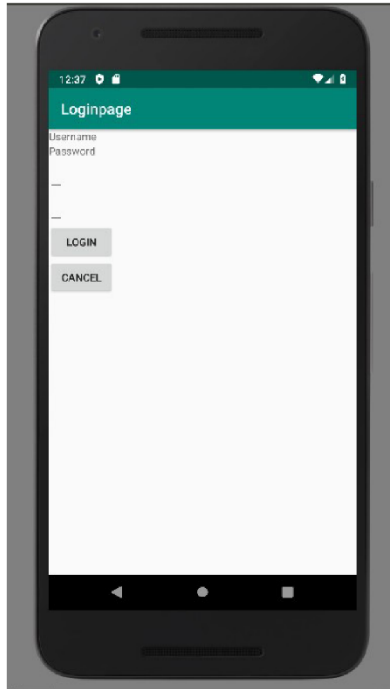
        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

    }

}
```

OUTPUT



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

PROGRAM

Activity_main.xml

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:gravity="center"
    xmlns:android="http://schemas.android.com/apk/res/android">
    <TextView
        android:id="@+id/tv"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Haritha"/>
    <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("Haritha Hari");
    }
}
```

OUTPUT



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

PROGRAM

Main_Activity.java

```
package com.example.sjcet.p3;
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;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
    public void changeLabelContent(View view) {
        tv1=(TextView)findViewById(R.id.tv1);
        et1=(EditText)findViewById(R.id.et1);
        tv1.setText(et1.getText());
    }
}
```

Activity main.xml

```
<LinearLayout android:layout_height="match_parent"
android:layout_width="match_parent"

android:orientation="vertical" android:gravity="center"
xmlns:android="http://schemas.android.com/apk/res/android">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/tv1"
        android:text="Text1"/>
    <EditText
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/et1"
        android:hint="Enter the content"/>
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/b1"
        android:text="ChangeText"
        android:onClick="changeLabelContent"/>
```

</LinearLayout

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);
```

```
    }
```

```
}
```



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

```

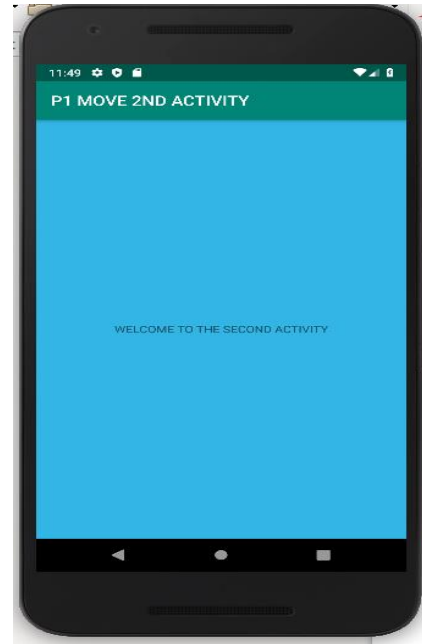
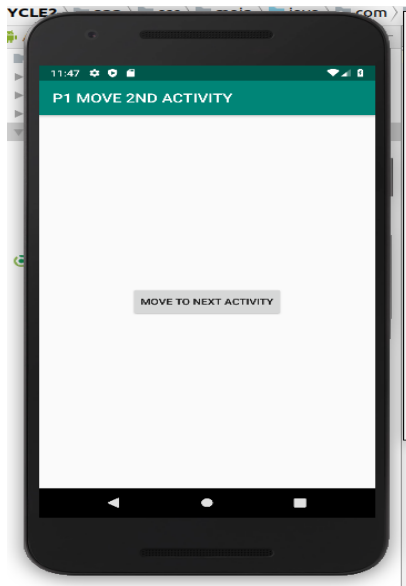
<LinearLayout android:layout_width="match_parent"
android:layout_height="match_parent"

```

```
        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>
```

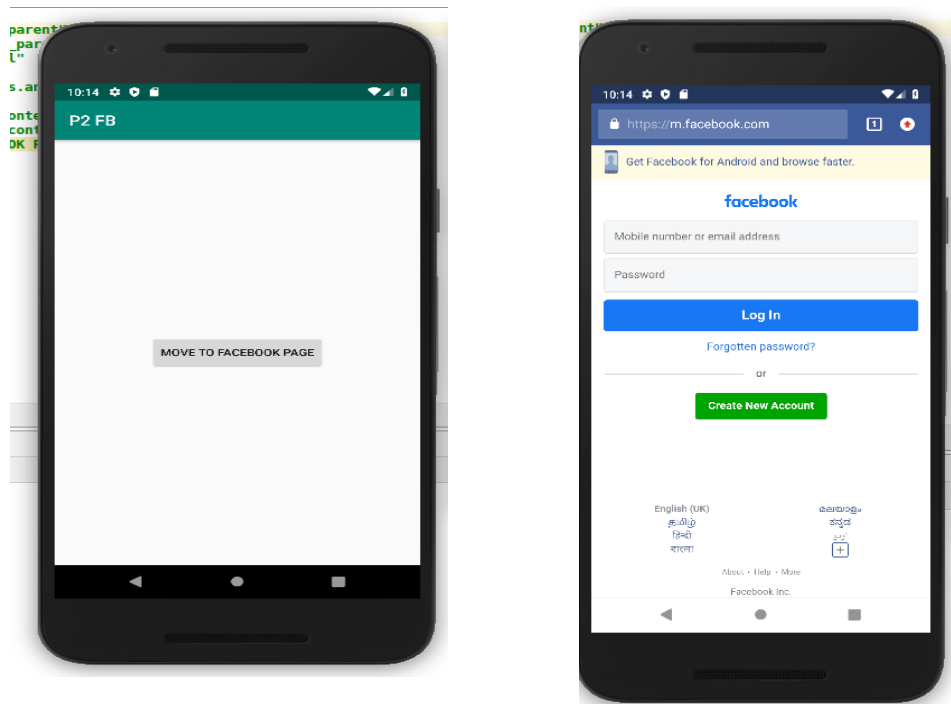
Main_Activity.java

```
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**

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout
    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=".first_activity">
    <EditText
        android:id="@+id/send_text_id"
        android:layout_width="300dp"
        android:layout_height="wrap_content"
        android:textSize="25dp"
        android:hint="Input"
        android:textStyle="bold"
        android:layout_marginTop="20dp"
        android:layout_marginLeft="40dp"/>
    <Button
        android:id="@+id/send_button_id"
        android:layout_width="wrap_content"
        android:layout_height="40dp"
        android:text="send"
        android:textStyle="bold"
        android:layout_marginTop="150dp"
```

```
        android:layout_marginLeft="150dp"/>
</RelativeLayout>
```

Activity_main2.xml

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

<RelativeLayout 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="org.HELLO WORLD.navedmalik.sendthedata.Second_activity">
    <TextView
        android:id="@+id/received_value_id"
        android:layout_width="300dp"
        android:layout_height="50dp"
        android:textStyle="bold"
        android:textSize="40dp"
        android:layout_marginTop="20dp"
        android:layout_marginLeft="40dp"/>
</RelativeLayout>
```

Main_Activity.java

```
package com.example.sjcet.p2;

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 {
    // define the variable
    Button send_button;
    EditText send_text;
    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        send_button = (Button)findViewById(R.id.send_button_id);
        send_text = (EditText)findViewById(R.id.send_text_id);
        // add the OnClickListener in sender button
        // after clicked this button following Instruction will run
        send_button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v)
            {
```

```

        // get the value which input by user in EditText
        // and convert it to string
        String str = send_text.getText().toString();
        // Create the Intent object of this class Context() to Second_activity class
        Intent intent = new Intent(getApplicationContext(), Main2Activity.class);
        // now by putExtra method put the value in key, value pair
        // key is message_key by this key we will receive the value, and put the string
        intent.putExtra("message_key", str);
        // start the Intent
        startActivity(intent);
    }
});
}
}

```

Main_Activity2.java

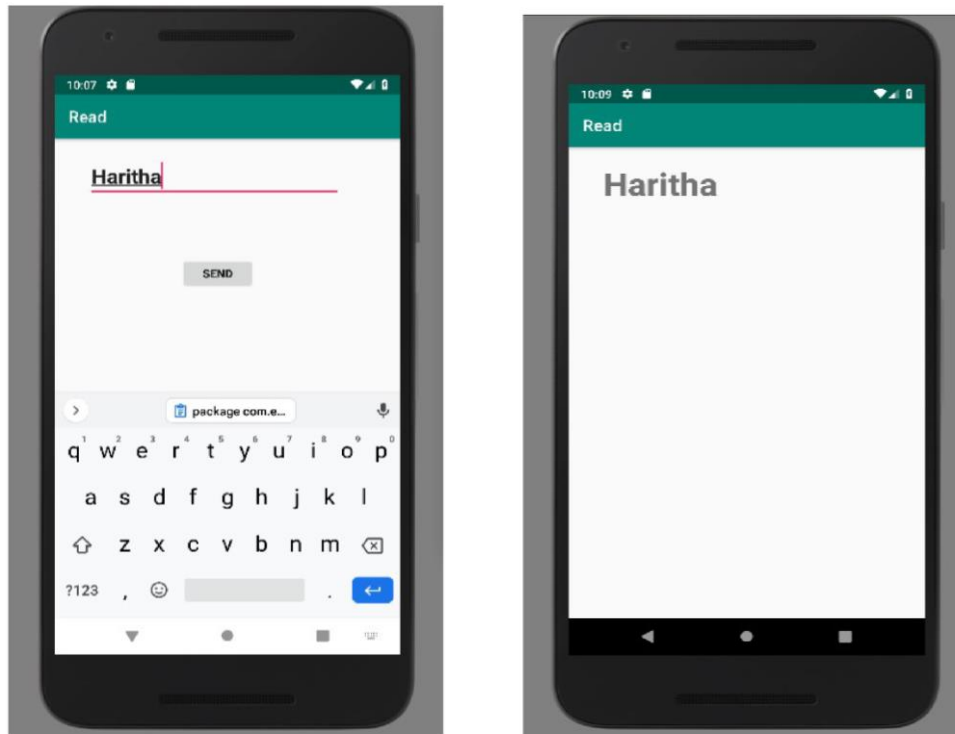
```

package com.example.sjcet.p2;

import android.content.Intent;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.TextView;
public class Main2Activity extends AppCompatActivity {
    TextView receiver_msg;
    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
        receiver_msg = (TextView)findViewById(R.id.received_value_id);
        // create the get Intent object
        Intent intent = getIntent();
        // receive the value by getStringExtra() method
        // and key must be same which is send by first activity
        String str = intent.getStringExtra("message_key");
        // display the string into textView
        receiver_msg.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)) {
```

```
        editTextLastName.setError("Last name is required!");
    }
    if (isEmpty(editTextMobile)) {
        editTextMobile.setError("mobile number is required!");
    }
    if (isEmpty(editTextgender)) {
        editTextgender.setError("Gender is required!");
    }
    if (isEmpty(editTextpassword)) {
        editTextpassword.setError("Password is required!");
    }
    if (isEmpty(editTextDob)) {
        editTextDob.setError("DOB is required!");
    }
    if (isEmail(editTextEmail) == false) {
        editTextEmail.setError("Enter valid email!");
    }
}
}
```

Main_Activity2.java

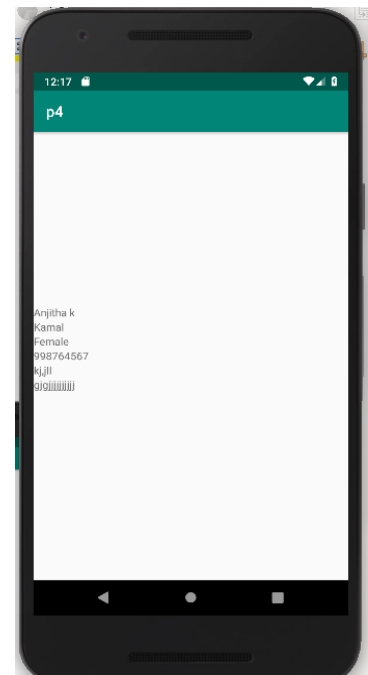
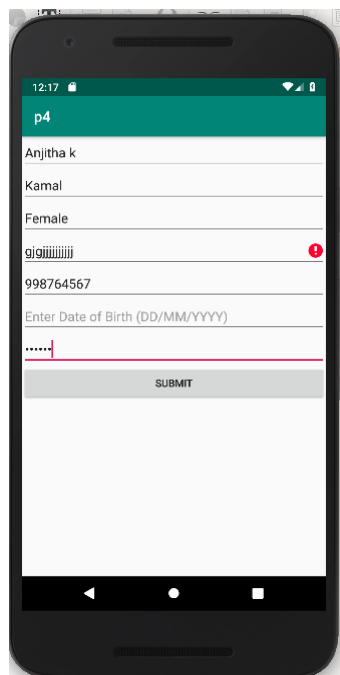
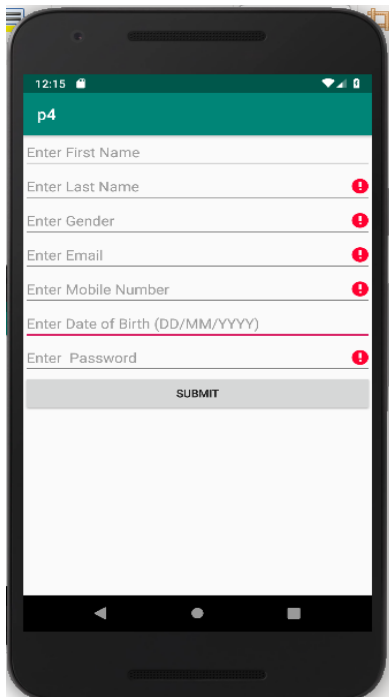
```
import android.content.SharedPreferences;
import android.widget.TextView;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
public class Main2Activity extends AppCompatActivity {
    TextView tv,tv1,tv2,tv3,tv4,tv5,tv6;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
        tv=findViewById(R.id.tv);
        tv1=findViewById(R.id.tv1);
        tv2=findViewById(R.id.tv2);
        tv3=findViewById(R.id.tv3);
        tv4=findViewById(R.id.tv4);
```

```

tv5 =findViewById(R.id.tv5);
tv6 =findViewById(R.id.tv6);
Intent intent = getIntent();
SharedPreferences mypref=getSharedPreferences("activity_main2.xml",0);
String str = mypref.getString("fname",null);
String str1 = mypref.getString("lname",null);
String str2 = mypref.getString("gender",null);
String str3 = mypref.getString("phone",null);
String str4 = mypref.getString("pwd",null);
String str5 = mypref.getString("email",null);
String str6 = mypref.getString("dob",null);
tv.setText(str);
tv1.setText(str1);
tv2.setText(str2);
tv3.setText(str3);
tv4.setText(str4);
tv5.setText(str5);
tv6.setText(str6);
}
}

```

OUTPUT



10.login and registration

PROGRAM

Activity_home.xml

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".home">

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

Activity_Main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <Button
        android:id="@+id/btn1"
        android:layout_width="100dp"
        android:layout_height="51dp"
        android:layout_marginTop="24dp"
        android:onClick="register"
        android:text="Register"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/btn2" />

    <Button
        android:id="@+id/btn2"
        android:layout_width="79dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="24dp"
        android:layout_marginBottom="24dp"
        android:onClick="login"
```

```

        android:text="Login"
        app:layout_constraintBottom_toTopOf="@+id/btn1"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/edpass" />

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

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

</android.support.constraint.ConstraintLayout>
activity_register.xml
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".register">

    <EditText
        android:id="@+id/edtxt1"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginTop="24dp"
        android:layout_marginBottom="24dp"
        android:ems="10"
        android:hint="Name"
        android:inputType="textPersonName"

```

```

app:layout_constraintBottom_toTopOf="@+id/edtxt2"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />

```

```

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

```

```

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

```

```

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

```

```

</android.support.constraint.ConstraintLayout>

```

home.java

```

package com.example.sjcet.constlayout;

```

```

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

```

```

public class home extends AppCompatActivity {

```

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

Main_Activity.java
package com.example.sjcet.constlayout;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

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

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

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

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

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

    }
}
```

Register.java

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

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

public class register extends AppCompatActivity {

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

    public void rgstr(View view) {
        EditText E1,E2,E3,E4,E5;
        E1 = (EditText) findViewById(R.id.edtxt1);
        E2 = (EditText) findViewById(R.id.edtxt2);
        E3 = (EditText) findViewById(R.id.edtxt3);
        E4 = (EditText) findViewById(R.id.edtxt4);
        E5 = (EditText) findViewById(R.id.edtxt5);

        String MobilePattern = "[0-9]{10}";

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

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

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

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

        else if(E5.length() == 0) {
            Toast.makeText(this, "Enter valid password", Toast.LENGTH_SHORT).show();
        }
    }
}
```

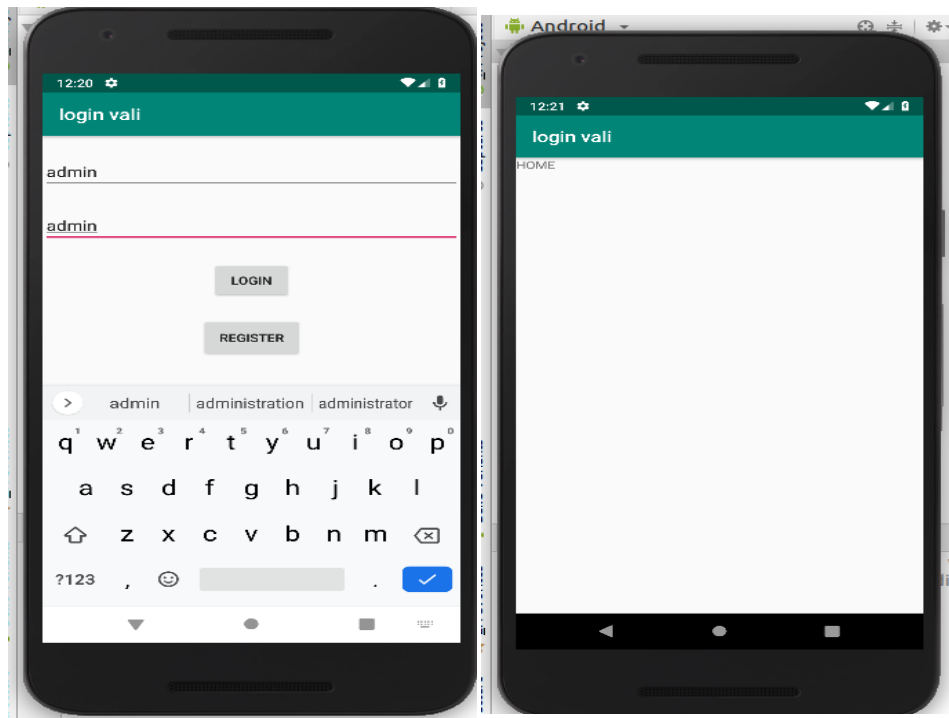
```

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

}
}
}

```

OUTPUT



11.List view

PROGRAM

Main_activity.java

```

package com.example.sjcet.listview;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.ArrayAdapter;
import android.widget.ListView;
public class MainActivity extends AppCompatActivity {
    ListView lv;
    @Override
    protected void onCreate(Bundle savedInstanceState) {

```

```
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
lv=(ListView)findViewById(R.id.lv);
String[] courses={"MCA","MBA","BBA","BCA"};
ArrayAdapter adapter = new
ArrayAdapter(this,android.R.layout.simple_list_item_1,courses);
lv.setAdapter(adapter);
}
}
```

Activity_Main.xml

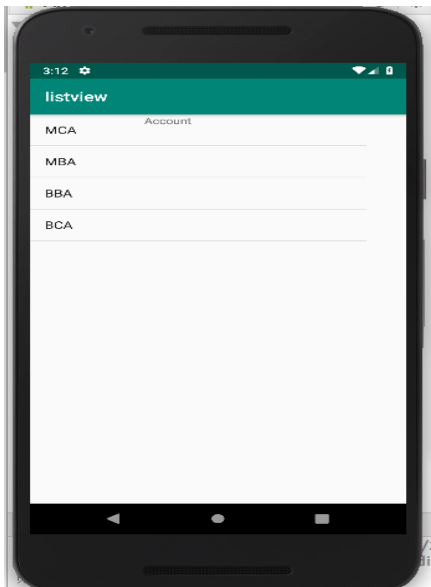
```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".MainActivity">
<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
<TextView
    android:id="@+id/textView"
    android:layout_width="162dp"
    android:layout_height="47dp"
    android:layout_marginStart="8dp"
    android:layout_marginLeft="8dp"
    android:layout_marginEnd="8dp"
    android:layout_marginRight="8dp"
    android:text="Account"
```

```

        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        tools:layout_editor_absoluteY="64dp" />
<ListView
    android:id="@+id/lv"
    android:layout_width="368dp"
    android:layout_height="321dp"
    tools:layout_editor_absoluteX="8dp"
    tools:layout_editor_absoluteY="131dp" />
</android.support.constraint.ConstraintLayout>

```

OUTPUT



12.List View using Toast

PROGRAM

Activity_Main.xml

```

<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"

```



```

        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
<TextView
    android:id="@+id/tv"
    android:layout_width="162dp"
    android:layout_height="47dp"
    android:layout_marginStart="8dp"
    android:layout_marginLeft="8dp"
    android:layout_marginEnd="8dp"
    android:layout_marginRight="8dp"
    android:text="Account"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    tools:layout_editor_absoluteY="64dp" />
<ListView
    android:id="@+id/lv"
    android:layout_width="368dp"
    android:layout_height="321dp"
    tools:layout_editor_absoluteX="8dp"
    tools:layout_editor_absoluteY="131dp" />
</android.support.constraint.ConstraintLayout>

```

Main_Activity.java

```

package com.example.sjcet.tostlistview;
import android.content.Intent;
import android.net.Uri;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.TextView;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity implements
AdapterView.OnItemClickListener {
    TextView tv;
    ListView lv;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        tv=(TextView)findViewById(R.id.tv);
        String msg=getIntent().getStringExtra("mykey");// receiving the data
        tv.setText("welcome"+msg);
    }
}

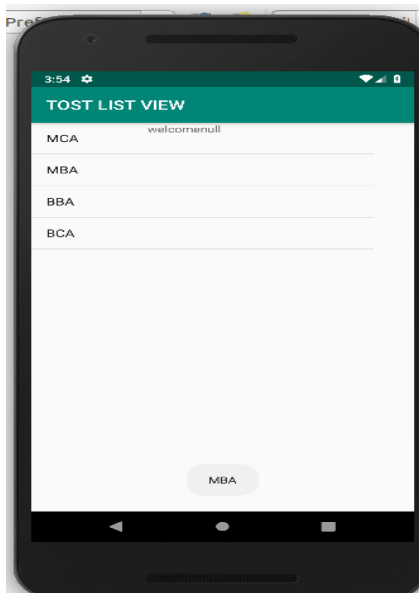
```

```

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

```

OUTPUT



13.Grid view

PROGRAM

Activity_main.xml

```

<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
    <GridView
        android:id="@+id/gv"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"

```

```

        android:columnWidth="100dp"
        android:minHeight="100dp"
        android:numColumns="auto_fit"
        android:stretchMode="columnWidth"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</android.support.constraint.ConstraintLayout>

```

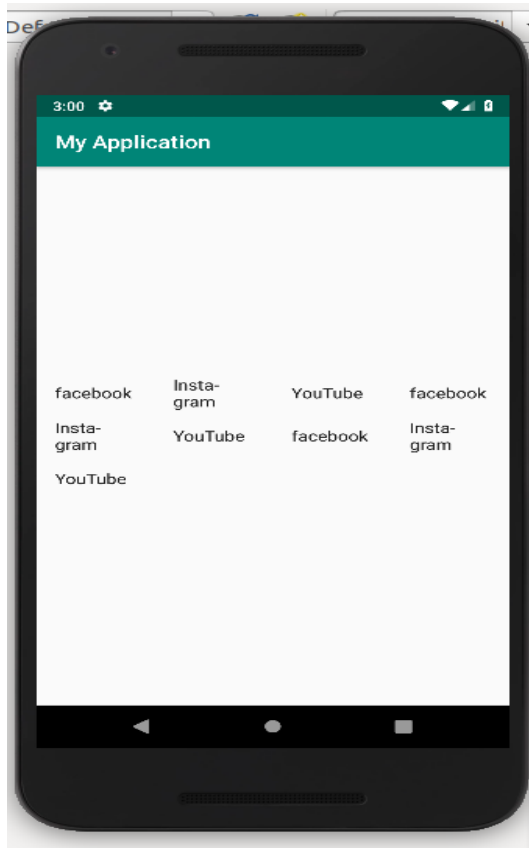
Main_Activity.java

```

package com.example.sjcet.myapplication;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
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","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"

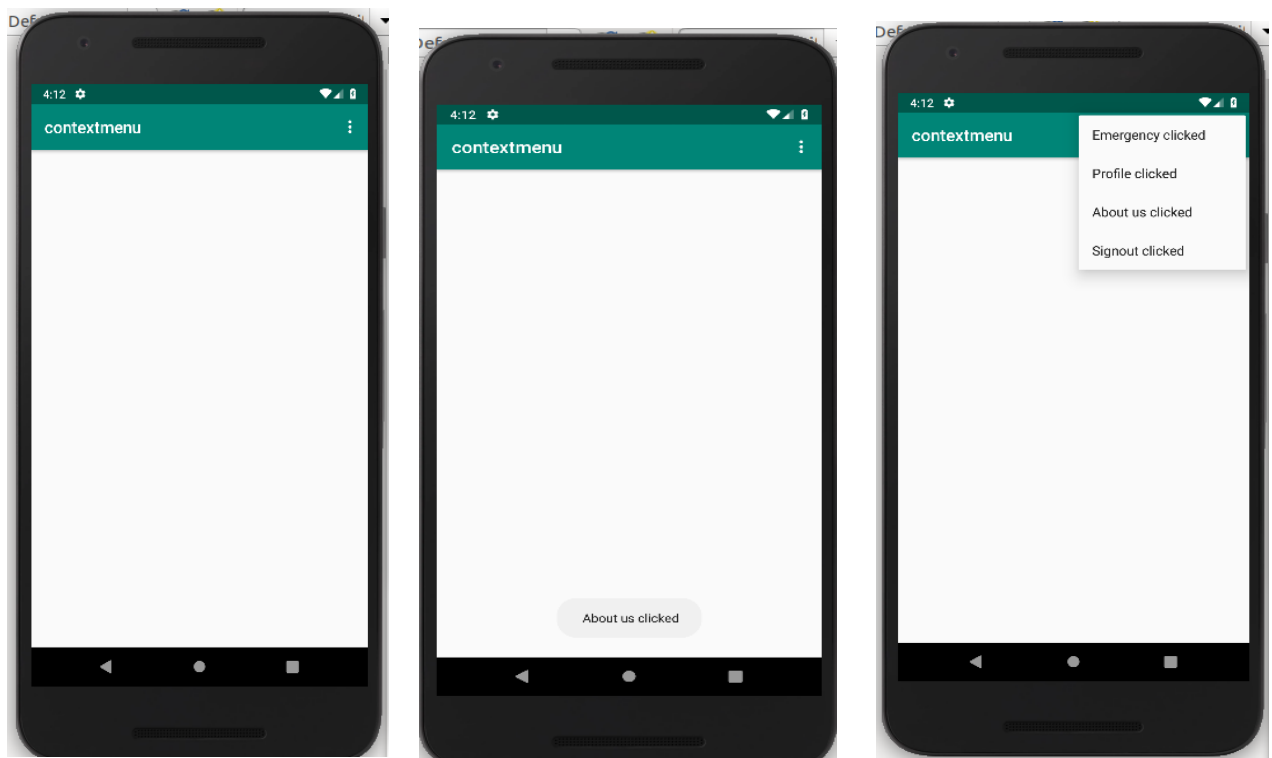
```

```

        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;
        }
    }
}

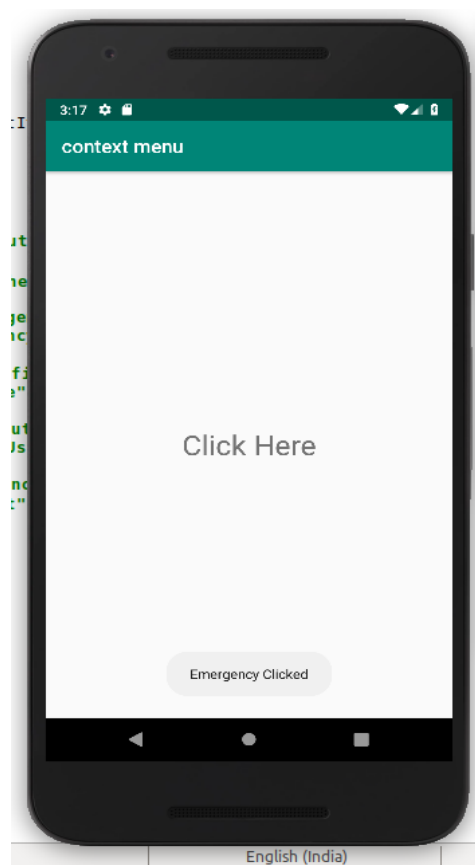
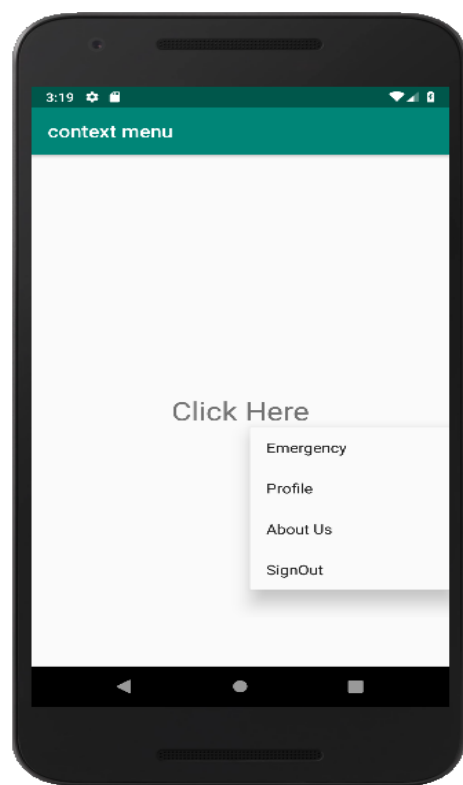
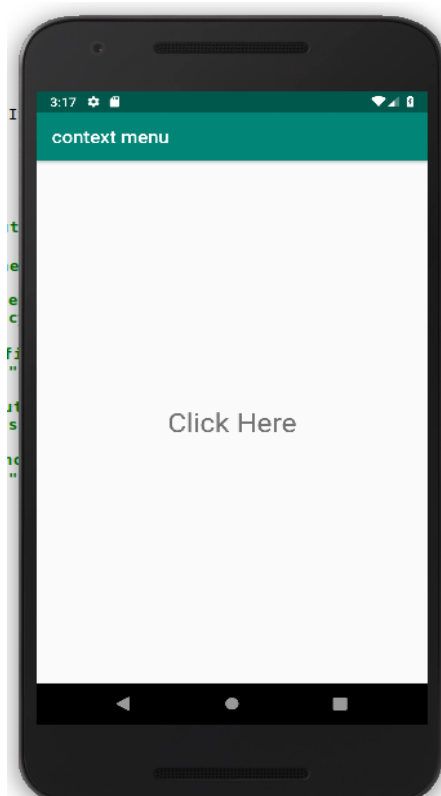
```

```
        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 uses SQL database**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">
<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

1:04

databasepgm

pinky

m

100

INSERT READ UPDATE DELETE

Id: 6
Name: pinky
Surname: m
marks: 100