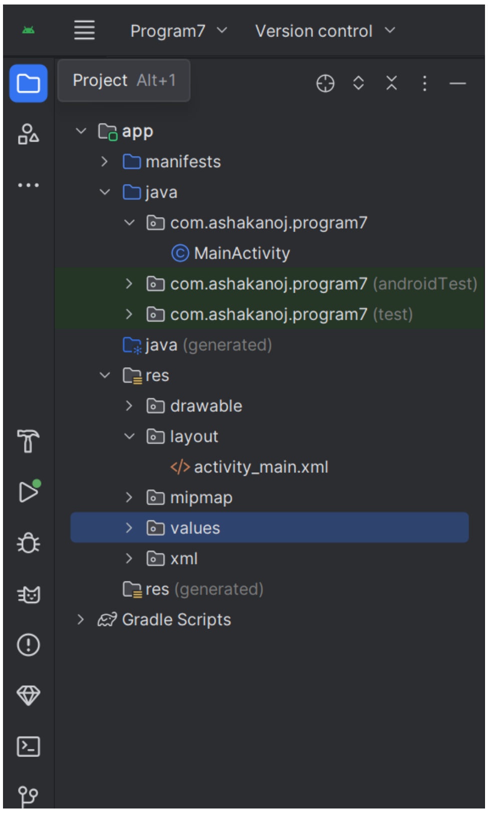
7. Read/ write the Local data.

STRUCTURE OF A PROGRAM:

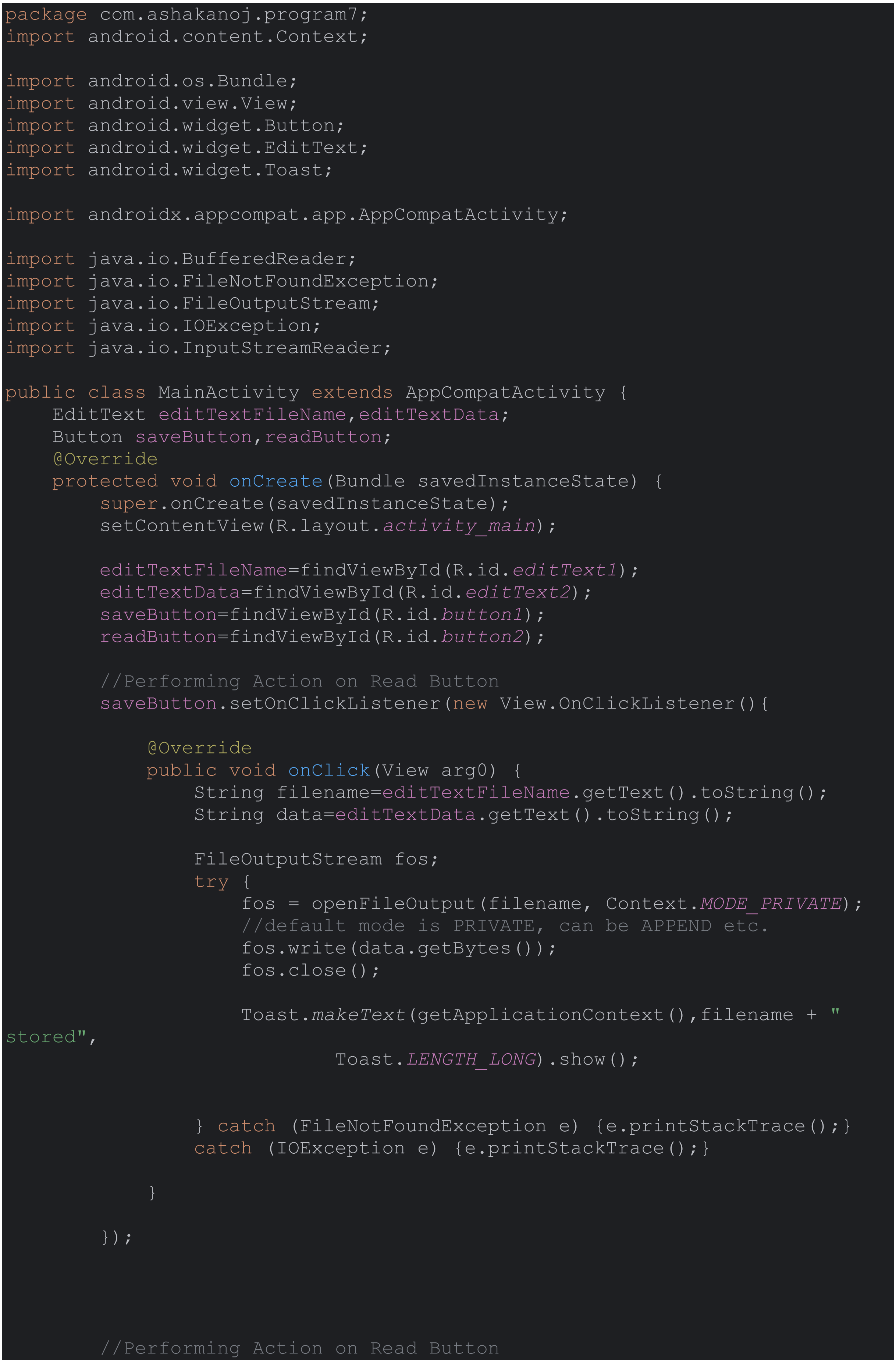


```
app
  manifests
  java
    com.ashakanoj.program7
      MainActivity
    com.ashakanoj.program7 (androidTest)
    com.ashakanoj.program7 (test)
  java (generated)
  res
    drawable
    layout
      activity_main.xml
    mipmap
    values
    xml
  res (generated)
Gradle Scripts
```

activity_main.xml File:

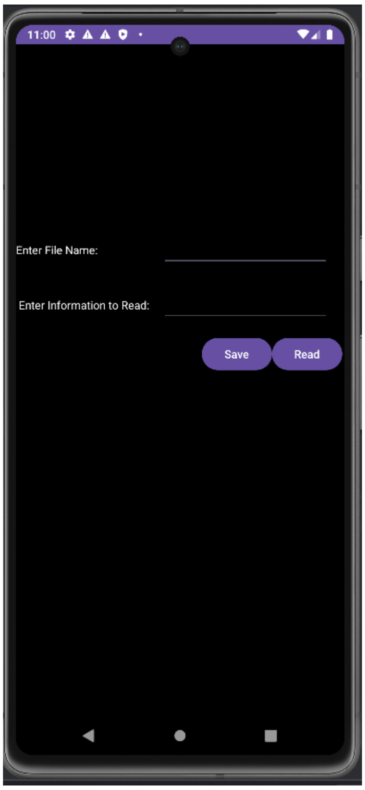
```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingTop="@dimen/activity_vertical_margin"
    android:background="@color/black"
    tools:context=".MainActivity" >

    <EditText
        android:id="@+id/editText1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_alignParentRight="true"
        android:layout_marginTop="134dp"
        android:layout_marginRight="19dp"
        android:textColor="@color/white"
        android:ems="10">

        <requestFocus />
    </EditText>
    <EditText
        android:id="@+id/editText2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignRight="@+id/editText1"
        android:layout_below="@+id/editText1"
        android:layout_marginTop="24dp"
        android:textColor="@color/white"
        android:ems="10" />

    <TextView
        android:id="@+id/textView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignBaseline="@+id/editText1"
        android:layout_alignBottom="@+id/editText1"
        android:layout_alignParentLeft="true"
        android:textColor="@color/white"
        android:text="Enter File Name:" />

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignBaseline="@+id/editText2"
        android:layout_alignBottom="@+id/editText2"
        android:layout_alignParentLeft="true"
        android:textColor="@color/white"
        android:text=" Enter Information to Read:" />

    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/editText2"
        android:layout_below="@+id/editText2"
        android:layout_marginLeft="50dp"
        android:layout_marginTop="16dp"
        android:text="Save" />

    <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignBaseline="@+id/button1"
        android:layout_alignBottom="@+id/button1"
        android:layout_toRightOf="@+id/button1"
        android:text="Read" />

</RelativeLayout>
```

MainActivity.xml File:



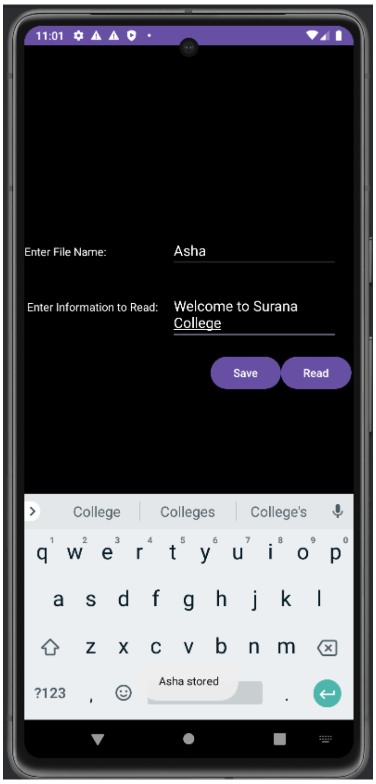
```
package com.ashakanoj.program7;
import android.content.Context;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

import java.io.BufferedReader;
import java.io.FileNotFoundException;
import java.io.FileOutputStream;
import java.io.IOException;
import java.io.InputStreamReader;

public class MainActivity extends AppCompatActivity {
    EditText editTextFileName,editTextData;
    Button saveButton,readButton;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        editTextFileName=findViewById(R.id.editText1);
        editTextData=findViewById(R.id.editText2);
        saveButton=findViewById(R.id.button1);
        readButton=findViewById(R.id.button2);

        //Performing Action on Read Button
        saveButton.setOnClickListener(new View.OnClickListener(){

            @Override
            public void onClick(View arg0) {
                String filename=editTextFileName.getText().toString();
                String data=editTextData.getText().toString();

                FileOutputStream fos;
                try {
                    fos = openFileOutput(filename, Context.MODE_PRIVATE);
                    //default mode is PRIVATE, can be APPEND etc.
                    fos.write(data.getBytes());
                    fos.close();

                    Toast.makeText(getApplicationContext(),filename + "
stored",
                            Toast.LENGTH_LONG).show();


                } catch (FileNotFoundException e) {e.printStackTrace();}
                catch (IOException e) {e.printStackTrace();}

            }

        });




        //Performing Action on Read Button
        readButton.setOnClickListener(new View.OnClickListener(){

            @Override
            public void onClick(View arg0) {
                String filename=editTextFileName.getText().toString();
                StringBuffer stringBuffer = new StringBuffer();
                try {
                    //Attaching BufferedReader to the FileInputStream by
the help of InputStreamReader
                    BufferedReader inputReader = new BufferedReader(new
InputStreamReader(
                            openFileInput(filename)));
                    String inputString;
                    //Reading data line by line and storing it into the
stringbuffer
                    while ((inputString = inputReader.readLine()) != null)
{
                        stringBuffer.append(inputString + "\n");
                    }

                } catch (IOException e) {
                    e.printStackTrace();
                }
                //Displaying data on the toast

Toast.makeText(getApplicationContext(),stringBuffer.toString(),Toast.LENGTH
_LONG).show();

            }

        });
    }
}
```

Output:



Enter File Name:

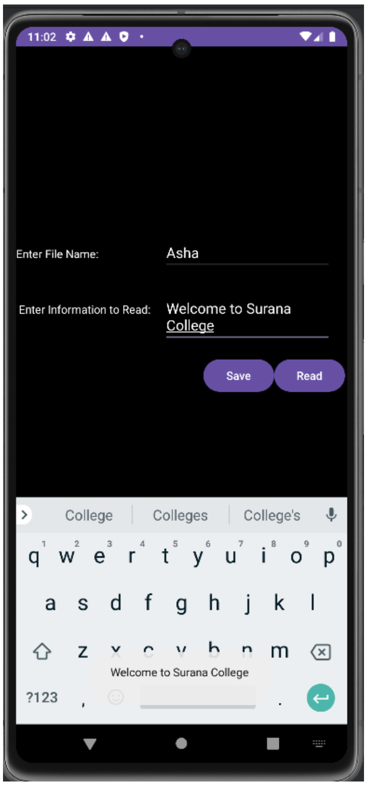
Enter Information to Read:



Enter File Name: Asha

Enter Information to Read: Welcome to Surana College

Asha stored



Enter File Name: Asha

Enter Information to Read: Welcome to Surana College

Welcome to Surana College