Practical No.: 7

Aim: Create an android application for File Handling (Read & Write)

Source Code:

Granting Permission to Read and Write in Internal Storage

AndroidManifest.xml

<uses-permission android:name="android.permission.WRITE_INTERNAL_STORAGE"/>
<uses-permission android:name="android.permission.READ_INTERNAL_STORAGE"/>

Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
< Relative Layout 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:layout width="349dp"
    android:layout height="wrap content"
    android:id="@+id/edt1"
    android:hint="@string/type_here"
    android:layout_alignParentTop="true"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="88dp"/>
  <Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/btn2"
    android:text="@string/write"
    android:layout alignParentEnd="true"
    android:layout_alignTop="@id/btn1"
    android:layout_marginEnd="136dp"
    android:textSize="18sp"
    android:textStyle="bold"
    android:layout_marginRight="136dp"
    android:layout alignParentRight="true" />
  <Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/btn3"
    android:text="@string/delete"
    android:textStyle="bold"
    android:layout alignParentEnd="true"
    android:layout_alignTop="@+id/btn1"
```

android:layout_marginEnd="30dp"

android:textSize="18sp"

```
android:layout alignParentRight="true"
    android:layout_marginRight="30dp" />
  <TextView
    android:layout_width="340dp"
    android:layout_height="219dp"
    android:id="'@+id/txtVw"
    android:layout_alignParentBottom="true"
    android:layout_alignStart="@+id/btn1"
    android:layout_marginBottom="58dp"
    android:layout marginStart="-25dp"
    android:scrollbars="horizontal|vertical"
    android:singleLine="false"
    android:visibility="visible"
    android:layout_marginLeft="-25dp"
    android:layout alignLeft="@+id/btn1"/>
  <Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/btn1"
    android:text="Read"
    android:layout marginStart="18dp"
    android:textSize="18sp"
    android:textStyle="bold"
    android:layout_above="@+id/txtVw"
    android:layout_alignStart="@id/edt1"
    android:layout_alignLeft="@id/edt1"
    android:layout marginLeft="18dp"/>
</RelativeLayout>
MainActivity.java
package com.example.practical_no_7;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;
import java.io.File;
import java.io.FileInputStream;
import java.io.FileNotFoundException;
import java.io.FileOutputStream;
import java.io.IOException;
public class MainActivity extends AppCompatActivity {
  EditText e1;
  Button b1,b2,b3;
  TextView txt1;
```

```
String fileName="LabFile.txt";
  String message;
  FileOutputStream fos;
  FileInputStream fin;
  File file;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    e1=findViewById(R.id.edt1);
    b1=findViewById(R.id.btn1);
    b2=findViewById(R.id.btn2);
    b3=findViewById(R.id.btn3);
    txt1=findViewById(R.id.txtVw);
    b2.setOnClickListener(
         new View.OnClickListener() {
           @Override
           public void onClick(View v) {
             message=e1.getText().toString();
                fos=openFileOutput(fileName,MODE PRIVATE);
                fos.write(message.getBytes());
                fos.close();
                Toast.makeText(MainActivity.this, "File Written and Saved Successfully!",
Toast.LENGTH_SHORT).show();
             } catch (IOException e) {
                e.printStackTrace();
         }
    );
    b1.setOnClickListener(
         new View.OnClickListener() {
           @Override
           public void onClick(View v) {
                fin=openFileInput(fileName);
                String temp="";
                while((c=fin.read())!=1)
                  temp=temp+ (char) c;
                txt1.setText(temp);
                Toast.makeText(MainActivity.this, "File Read and Saved Successfully!",
Toast.LENGTH_SHORT).show();
             } catch (FileNotFoundException e) {
                e.printStackTrace();
              } catch (IOException e) {
                e.printStackTrace();
```

```
}
    );
    b3.setOnClickListener(
         new View.OnClickListener() {
           @Override
           public void onClick(View v) {
             file=new File(getFilesDir(),fileName);
             if(file.exists())
                deleteFile(fileName);
                Toast.makeText(MainActivity.this, "File Deleted Successfully!",
Toast.LENGTH_SHORT).show();
             else
               Toast.makeText(MainActivity.this, "File does not exist!",
To a st. LENGTH\_SHORT). show();
           }
         }
    );
  }
}
Strings.xml
<resources>
  <string name="app_name">Practical_No_7</string>
  <string name="type_here">Type Here</string>
  <string name="write">Write</string>
  <string name="delete">Delete</string>
</resources>
```

Output:

