Ex.No: 6 Date :	**Implement an application that writes data to the SD card**

AIM:

To implement an application that writes data to the SD card.

PROCEDURE:

1. Open Eclipse IDE.
2. Create the project Ex_No_6.
3. Go to package explorer in the left hand side. Select the project Ex_No_6.
4. Go to res folder and select layout. Double click the activity_main.xml file.
5. Now you can see the Graphical layout window.
6. Drag and drop the following components:
    a. Two EditTexts
    b. Two Buttons with labeled as READ and SAVE
7. Again go to package explorer in the left hand side. Select the project Ex_No_6.
8. Go to src folder. Double click the MainActivity.java file.
9. In java file write the activities done by the application such as actions of buttons.
10. Get the following permission in AndroidManifest.xml file: `<uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />`
11. Finally run the android application.

PROGRAMS:

activity_main.xml:

```
<RelativeLayout      xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools" an-
    droid:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context="com.example.ex_no_6.MainActivity" >

    <EditText
        android:id="@+id/editText
        1"
        android:layout_width="wra
        p_content"
        android:layout_height="wr
        ap_content"
```

```
    android:layout_alignParen
    tLeft="true"
    android:layout_alignParen
    tTop="true"
    android:ems="10"
    android:hint="Path"
    tools:ignore="TextFields,HardcodedText" >

    <request
    Focus />
</EditText>



<Button
    android:id="@+id/button1"
    android:layout_width="wrap_c
    ontent"
    android:layout_height="wrap_
    content"
    android:layout_alignTop="@+i
    d/editText1"
    android:layout_toRightOf="@+
    id/editText1"
    android:text="READ"
    tools:ignore="HardcodedText" />

<EditText
    android:id="@+id/editText2
    "
    android:layout_width="wrap
    _content"
    android:layout_height="wra
    p_content"
    android:layout_alignLeft="
    @+id/editText1"
    android:layout_centerVerti
    cal="true"
    android:ems="10"
    android:hint="Contents   of
    File"
    android:inputType="textMul
    tiLine"
    tools:ignore="HardcodedTex
    t" />

<Button
    android:id="@+id/button2"
    android:layout_width="wrap
    _content"
    android:layout_height="wra
```

```
p_content"
android:layout_alignParent
Right="true"
android:layout_centerVerti
cal="true"
android:text="SAVE"
tools:ignore="HardcodedTex
t" />

</Rel
ative
Layou
t>
```

MainActivity.java:

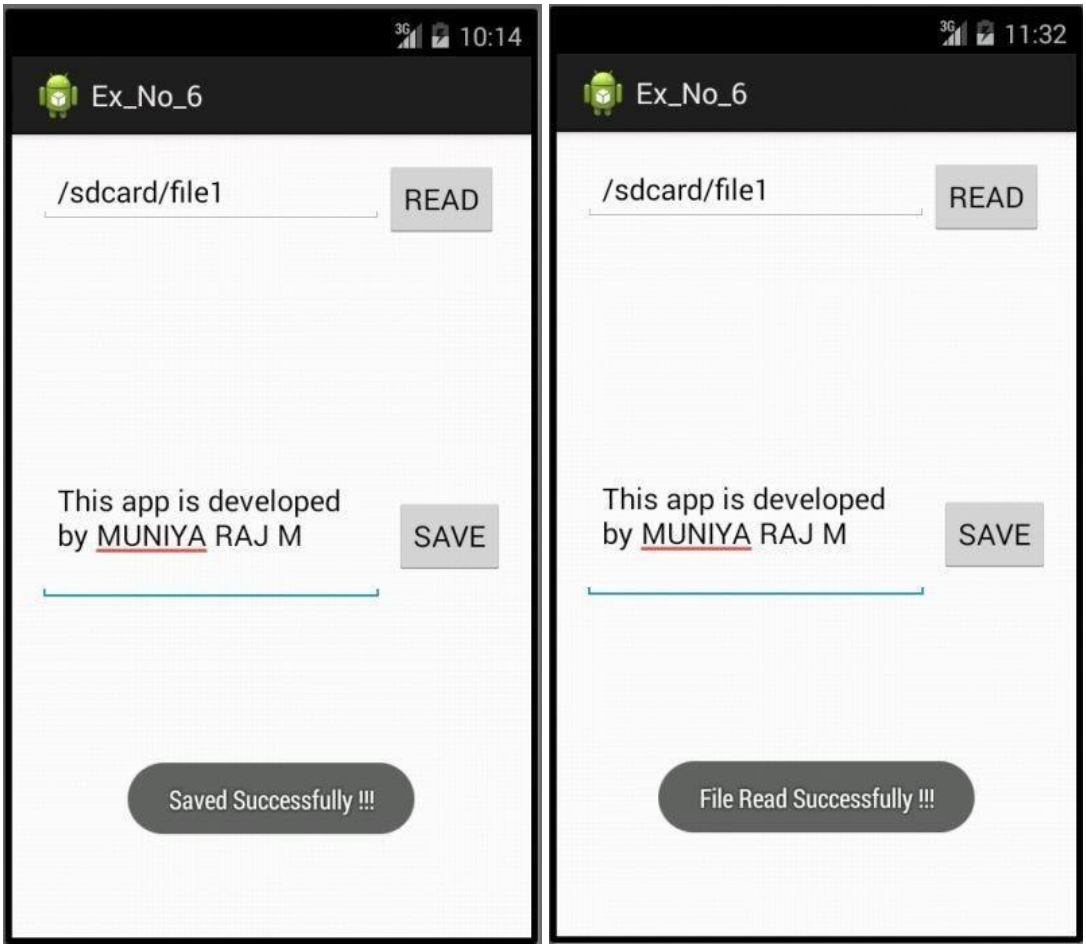
```
package
com.example.ex_no_6
;            import
java.io.BufferedRea
der;         import
java.io.File;
import
java.io.FileNotFoundExc
eption;          import
java.io.FileReader;
import
java.io.FileWriter;
import
java.io.IOException;
import
android.support.v7.app.ActionBarAc
tivity;                      import
android.annotation.SuppressLint;
import
android.content.SharedPreferences;
import  android.os.Bundle;  import
android.view.View;          import
android.view.View.OnClickListener;
import      android.widget.Button;
import    android.widget.EditText;
import android.widget.Toast;
public class MainActivity extends ActionBarActivity {
      @SuppressLint("SdCardPath")
      @Override
      protected       void       onCreate(Bundle
            savedInstanceState)                {
            super.onCreate(savedInstanceState);
            setContentView(R.layout.activity_mai
            n);
                           final EditText
          e1=(EditText)findViewById(R.id.editText1); final
                             EditText
```

```
e2=(EditText)findViewById(R.id.editText2); Button
      b1=(Button)findViewById(R.id.button1);
   Button b2=(Button)findViewById(R.id.button2);
   String      path=getPreferences(MODE_PRIVATE).getString("fpath",
   "/sdcard/file1");  e1.setText(path);  b1.setOnClickListener(  new
   OnClickListener()
                {
                      @Override
                          public void
                      onClick(View arg0) {
                      // TODO Auto-generated method stub

                            File f=new File(e1.getText().toString());
                       String s="";
                            StringBuilder sb=new StringBuilder();
                            FileReader fr =
                            null; try { fr =
                            new
                            FileReader(f);
                            } catch
                                  (FileNotFoundExceptio
                                  n e) { // TODO Auto-
                                  generated catch block
                                  e.printStackTrace();
                            }
                            BufferedReader        br=new
                            BufferedReader(fr);   try   {
                            while((s=br.readLine())!=nu
                            ll)
                                  {
                                        sb.ap
                                        pend(
                                        s+"\n
                                        ");
                                  }
                            } catch (IOException e) {
                                  //  TODO  Auto-generated  catch  block
                                  e.printStackTrace();
                            }
                            Toast.makeText(getApplicationContext(),
                            "File Read Suc-
cessfully   !!!",   Toast.LENGTH_LONG).show();
                                  e2.se
                                  tText
                                  (sb);
                            }
                      }
                      )
                      ;
   b2.setOnClickListener
                      (    new
```

```
                        OnClickL
                        istener(
                        )
                        {
                                @Override
                                    public void
                                onClick(View arg0) {
                                // TODO Auto-generated method stub

                                        File   f=new   File(e1.getText().toString());
                                        File-
                                        Writer fw =
                                        null; try { fw =
                                        new
                                        FileWriter(f);
                                } catch (IOException e3) {
                                                //  TODO  Auto-generated  catch  block
                                                e3.printStackTrace();
                                        } try {
                                        fw.write(e2.getText().toStr
                                        ing());
                                } catch (IOException e2) {
                                                //  TODO  Auto-generated  catch  block
                                                e2.printStackTrace();
                                        }
                                        try
                                                {
                                                f
                                                w
                                                .
                                                c
                                                l
                                                o
                                                s
                                                e
                                                (
                                                )
                                                ;
                                } catch (IOException e2) {
                                                //  TODO  Auto-generated  catch  block
                                                e2.printStackTrace();
                                        }
        SharedPreferences.Editor e=getPreferences(MODE_PRIVATE).edit();
                                        e.putString("fpath", f.getPath());
                                e.commit();
                                        Toast.makeText(getApplicationContext(),
                                        "Saved
    Successfully !!!", Toast.LENGTH_LONG).show();
                                }
                        });
         }
```

```
}
```

OUTPUT:


10:14
Ex_No_6
/sdcard/file1
READ
This app is developed
by MUNIYA RAJ M
SAVE
Saved Successfully !!!
11:32
Ex_No_6
/sdcard/file1
READ
This app is developed
by MUNIYA RAJ M
SAVE
File Read Successfully !!!

RESULT:

Thus the application that writes data to the SD card has been implemented and the output was verified.