

9. Saving Data to Internal Storage as files

Aim:

To create an android application to save data in a text file.

Objective:

Create an android application to save data in a text file. Load file from memory and show in the view.

Tools:

Android Studio

Procedure:

Source Code

MainActivity.java

```
package com.mylab.savedata;

import android.app.Activity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.InputStreamReader;
import java.io.OutputStreamWriter;

public class MainActivity extends Activity {
    EditText mEditText;
    Button mBtnSave, mBtnLoad;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        mEditText = (EditText) findViewById(R.id.et_message);
        mBtnSave = (Button) findViewById(R.id.btn_save);
        mBtnLoad = (Button) findViewById(R.id.btn_load);
        mBtnSave.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String message = mEditText.getText().toString();
                try {
                    FileOutputStream fout = openFileOutput("textfile.txt", MODE_PRIVATE);
                    OutputStreamWriter osw = new OutputStreamWriter(fout);
                    osw.write(message);
                    osw.flush();
                    osw.close();
                    Toast.makeText(getApplicationContext(), "File saved successfully",
                        Toast.LENGTH_LONG).show();
                    mEditText.setText("");
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
        mBtnLoad.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                try {
                    FileInputStream fin = openFileInput("textfile.txt");
                    InputStreamReader isr = new InputStreamReader(fin);
                    char[] inputBuffer = new char[100];
                    String s = "";
                    int charRead;
                    while ((charRead = isr.read(inputBuffer)) > 0) {
                        String readString = String.valueOf(inputBuffer, 0, charRead);
                    }
                }
            }
        });
    }
}
```

```

        s += readString;
        inputBuffer = new char[100];
    }
    mEditText.setText(s);
    Toast.makeText(getApplicationContext(), "File loaded successfully",
        Toast.LENGTH_LONG).show();
} catch (Exception e) {
    e.printStackTrace();
}
}
});
}
}
}

```

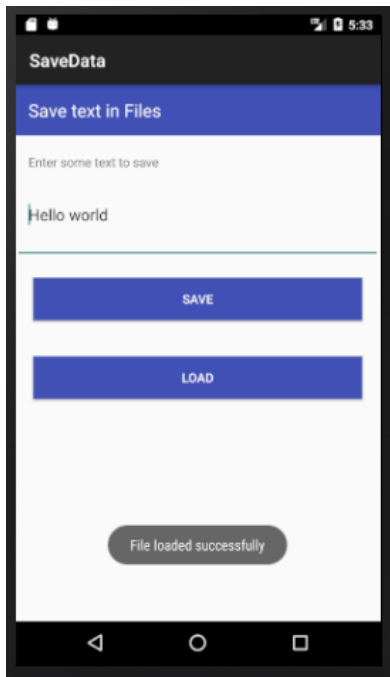
activity_main.xml

```

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical">
    <TextView
        android:id="@+id/textView2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:background="@color/colorPrimary"
        android:gravity="center_vertical"
        android:paddingBottom="15dp"
        android:paddingLeft="15dp"
        android:paddingTop="15dp"
        android:text="Save text in Files"
        android:textColor="#ffffff"
        android:textSize="20sp" />
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:layout_marginTop="20dp"
        android:paddingLeft="15dp"
        android:text="Enter some text to save" />
    <EditText
        android:id="@+id/et_message"
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:ems="10"
        android:hint="Message to save"
        android:paddingLeft="15dp" />
    <Button
        android:id="@+id/btn_save"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:layout_margin="20dp"
        android:background="@color/colorPrimary"
        android:text="Save"
        android:textColor="#ffffff" />
    <Button
        android:id="@+id/btn_load"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:layout_margin="20dp"
        android:background="@color/colorPrimary"
        android:text="Load"
        android:textColor="#ffffff" />
</LinearLayout>

```

Output:



Result:

Output is verified