Experiment 8

Aim: Create an android application using File Handling for text file.

Code:

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"
    android:padding="16dp">

    <!-- EditText for user input -->
    <EditText
        android:id="@+id/editText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter text to write to file"
        android:padding="10dp" />

    <!-- Buttons for file operations -->
    <Button
        android:id="@+id/btnWrite"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Write to File" />

    <Button
        android:id="@+id/btnRead"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Read from File" />

    <Button
        android:id="@+id/btnDelete"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Delete File" />

    <!-- TextView for displaying file content -->
    <TextView
        android:id="@+id/textView"
        android:layout_width="306dp"
        android:layout_height="90dp"
        android:paddingTop="20dp"
```

```
        android:text="File Content"
        android:textSize="18sp" />
</LinearLayout>
```

MainActivity.java:

```
package com.example.practical_8;


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.FileOutputStream;
import java.io.IOException;

public class MainActivity extends AppCompatActivity {

    private EditText editText;
    private TextView textView;
    private Button btnWrite, btnRead, btnDelete;
    private String fileName = "myfile.txt";

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

        editText = findViewById(R.id.editText);
        textView = findViewById(R.id.textView);
        btnWrite = findViewById(R.id.btnWrite);
        btnRead = findViewById(R.id.btnRead);
        btnDelete = findViewById(R.id.btnDelete);

        // Write to file
        btnWrite.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String content = editText.getText().toString();  //
Get content from EditText
                if (!content.isEmpty()) {
```

```
                    writeToFile(content);  // Write content to file
                } else {
                    Toast.makeText(MainActivity.this, "Please enter
some text", Toast.LENGTH_SHORT).show();
                }
            }
        });

        // Read from file
        btnRead.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                readFromFile();
            }
        });

        // Delete file
        btnDelete.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                deleteFile();
            }
        });
    }

    private void writeToFile(String content) {
        FileOutputStream fos = null;
        try {
            fos = openFileOutput(fileName, MODE_PRIVATE);
            fos.write(content.getBytes());
            Toast.makeText(this, "File Written Successfully",
Toast.LENGTH_SHORT).show();
        } catch (IOException e) {
            e.printStackTrace();
        } finally {
            if (fos != null) {
                try {
                    fos.close();
                } catch (IOException e) {
                    e.printStackTrace();
                }
            }
        }
    }

    private void readFromFile() {
        FileInputStream fis = null;
        try {
            fis = openFileInput(fileName);
```

```
            int c;
            StringBuilder stringBuilder = new StringBuilder();
            while ((c = fis.read()) != -1) {
                stringBuilder.append((char) c);
            }
            textView.setText(stringBuilder.toString());
            Toast.makeText(this, "File Read Successfully",
Toast.LENGTH_SHORT).show();
        } catch (IOException e) {
            e.printStackTrace();
            Toast.makeText(this, "File not found",
Toast.LENGTH_SHORT).show();
        } finally {
            if (fis != null) {
                try {
                    fis.close();
                } catch (IOException e) {
                    e.printStackTrace();
                }
            }
        }
    }

    private void deleteFile() {
        File dir = getFilesDir();
        File file = new File(dir, fileName);
        boolean deleted = file.delete();
        if (deleted) {
            textView.setText("");
            Toast.makeText(this, "File Deleted Successfully",
Toast.LENGTH_SHORT).show();
        } else {
            Toast.makeText(this, "File Not Found",
Toast.LENGTH_SHORT).show();
        }
    }
}
```

Screenshots: