EX NO:7 **REGISTER NO:210701509**

DATE:

SD CARD

AIM:

Implement an application to write the Register Number, Name and CGPA to SD card in text file format.

PROCEDURE:

- Open Android Studio and import the package
- In activity_main.xml drag and drop the buttons
- The button needs to perform actions to change the colour, font size and background colour
- Click android virtual device that should control the toolbar
- Design the graphical layout with the textview and buttons
- Run the application
- The version of android and name is displayed
- The theme of the file is also mentioned in a file
- Run the file using the version which is displayed to the users.

PROGRAM CODE:

AndroidManifest.xml:

```
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
package="com.example.writetofile">
<uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />
<application
android:allowBackup="true"
android:icon="@mipmap/ic_launcher"
android:label="@string/app_name"
android:roundIcon="@mipmap/ic_launcher_round"
android:supportsRtl="true"
android:theme="@style/AppTheme">
<activity android:name=".MainActivity">
<intent-filter>
<action android:name="android.intent.action.MAIN" />
<category android:name="android.intent.category.LAUNCHER" />
</intent-filter>
</activity>
</application>
</manifest>
```

activity_main.xml:

```
<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"
tools:context=".MainActivity">
<EditText
android:id="@+id/editTextName"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:hint="Enter Name" />
<EditText
android:id="@+id/editTextMarks"
android:layout_below="@id/editTextName"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_marginTop="16dp"
android:hint="Enter Marks" />
<Button
android:id="@+id/buttonWriteToFile"
android:layout_below="@id/editTextMarks"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_centerHorizontal="true"
android:layout_marginTop="16dp"
android:text="Write to File" />
</RelativeLayout>
```

MainActivity.kt:

```
package com.example.writetofile
import android.os.Bundle
import android.os.Environment
import android.widget.Button
import android.widget.EditText
import android.widget.Toast
import androidx.appcompat.app.AppCompatActivity
import java.io.File
import java.io.FileOutputStream
class MainActivity : AppCompatActivity() {
override fun onCreate(savedInstanceState: Bundle?) {
super.onCreate(savedInstanceState)
setContentView(R.layout.activity_main)
val editTextName = findViewById<EditText>(R.id.editTextName)
val editTextMarks = findViewById<EditText>(R.id.editTextMarks)
val buttonWriteToFile = findViewById<Button>(R.id.buttonWriteToFile)
buttonWriteToFile.setOnClickListener {
```

```
val name = editTextName.text.toString()
val marks = editTextMarks.text.toString()
if (name.isNotEmpty() && marks.isNotEmpty()) {
writeToFile(name, marks)
} else {
Toast.makeText(this, "Name and marks cannot be empty", Toast.LENGTH_SHORT).show()
}
}
}
private fun writeToFile(name: String, marks: String) {
val fileName = "student_details.txt"
val fileContent = "$name: $marks"
val root = Environment.getExternalStorageDirectory()
val file = File(root, fileName)
try {
val fileOutputStream = FileOutputStream(file, true)
fileOutputStream.write(fileContent.toByteArray())
fileOutputStream.write("\n".toByteArray())
fileOutputStream.close()
Toast.makeText(this, "Data written to $fileName", Toast.LENGTH_SHORT).show()
} catch (e: Exception) {
e.printStackTrace()
Toast.makeText(this, "Failed to write data to $fileName", Toast.LENGTH_SHORT).show()
}
}
}
```

OUTPUT:

RESULT: