

EX:NO:07

SD CARD

REG.NO:210701701

DATE:04/04/2024

### **AIM:-**

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

### **PROCEDURE:-**

Step 1: Add permissions.

Step 2: Check external storage availability.

Step 3: Write data to file.

Step 4: Handle errors.

Step 5:Test the application.

### **PRGRAM 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) {

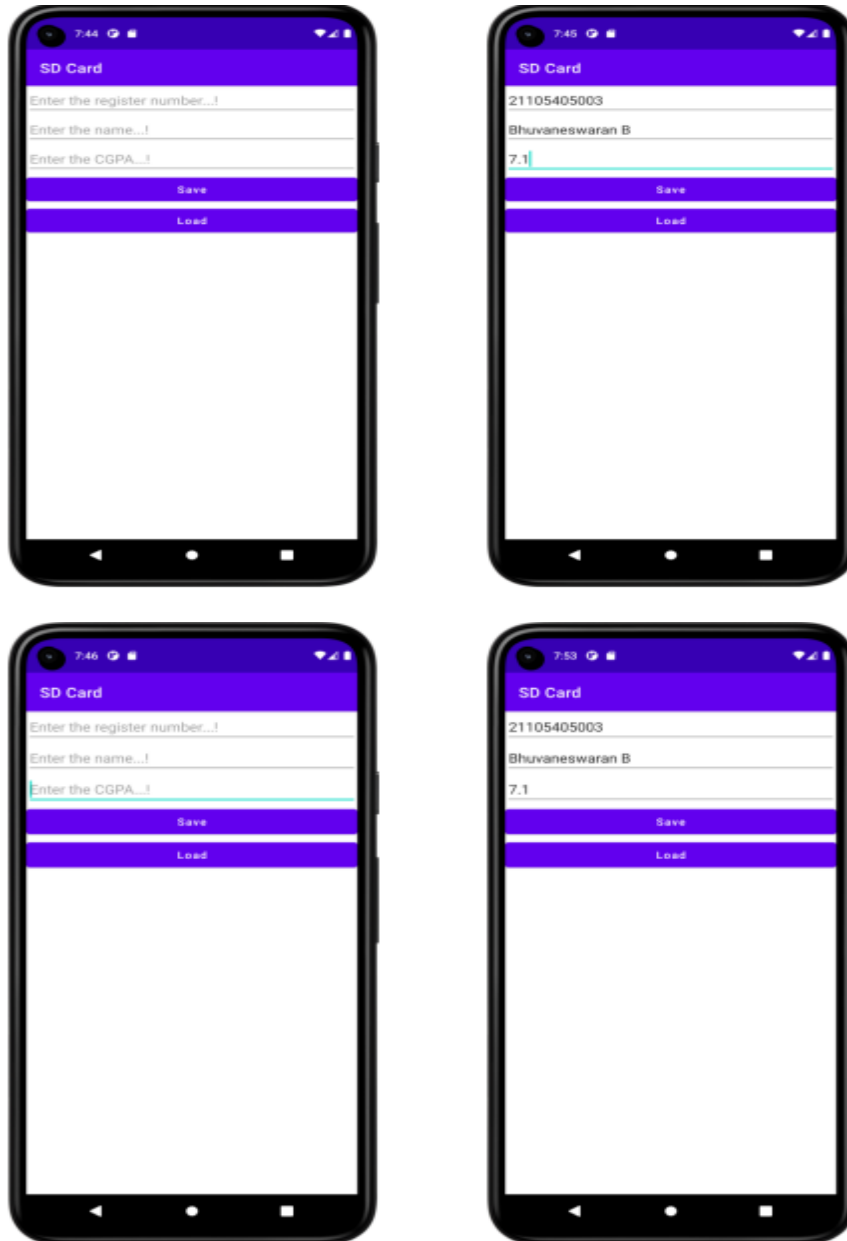
    e.printStackTrace()

    Toast.makeText(this, "Failed to write data to $fileName",
Toast.LENGTH_SHORT).show()

}

}
```

## OUTPUT:-



## RESULT:-

Thus to implement an application to write the Register Number, Name and CGPA to SD card in text file format.is implemented and executed successfully.