

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="20dp">

    <EditText
        android:id="@+id/editText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter text to save" />

    <Button
        android:id="@+id/saveButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Save to SD Card" />
</LinearLayout>
```

Main.java

```
package com.example.ja;

import android.Manifest;
import android.content.pm.PackageManager;
import android.os.Bundle;
import android.os.Environment;
import android.view.View;
import android.widget.Button;

import android.widget.EditText;
import android.widget.Toast;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;
import androidx.core.content.ContextCompat;
import java.io.File;
import java.io.FileOutputStream;
import java.io.IOException;

public class MainActivity extends AppCompatActivity {
    private static final int STORAGE_PERMISSION_CODE = 101;
```

```
EditText editText;  
Button saveButton;
```

```
@Override
```

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

```
    editText = findViewById(R.id.editText);  
    saveButton = findViewById(R.id.saveButton);
```

```
    saveButton.setOnClickListener(new View.OnClickListener() {
```

```
        @Override
```

```
        public void onClick(View v) {
```

```
            if (checkPermission()) {  
                writeToSDCard(editText.getText().toString());
```

```
            } else {  
                requestPermission();
```

```
        }
```

```
    }
```

```
});
```

```
}
```

```
// Check if permission is granted
```

```
private boolean checkPermission() {
```

```
    int result = ContextCompat.checkSelfPermission(this,  
        Manifest.permission.WRITE_EXTERNAL_STORAGE);
```

```
    return result == PackageManager.PERMISSION_GRANTED;
```

```
}
```

```
// Request permission
```

```
private void requestPermission() {
```

```
    ActivityCompat.requestPermissions(this, new  
        String[]{Manifest.permission.WRITE_EXTERNAL_STORAGE},  
        STORAGE_PERMISSION_CODE);
```

```
}
```

```
// Handle permission result
```

```
@Override
```

```
public void onRequestPermissionsResult(int requestCode, @NonNull String[] permissions,  
        @NonNull int[] grantResults) {
```

```
    super.onRequestPermissionsResult(requestCode, permissions, grantResults);
```

```
    if (requestCode == STORAGE_PERMISSION_CODE) {
```

```
        if (grantResults.length > 0 && grantResults[0] ==  
            PackageManager.PERMISSION_GRANTED) {
```

```
            Toast.makeText(this, "Permission granted!", Toast.LENGTH_SHORT).show();
```

```

    } else {
        Toast.makeText(this, "Permission denied!", Toast.LENGTH_SHORT).show();
    }
}

}

// Function to write data to SD Card
private void writeToSDCard(String data) {
    if (Environment.getExternalStorageState().equals(Environment.MEDIA_MOUNTED)) {
        File sdCard = Environment.getExternalStorageDirectory();
        File dir = new File(sdCard.getAbsolutePath() + "/MyAppData");
        if (!dir.exists()) {
            dir.mkdirs();
        }

        File file = new File(dir, "sample.txt");
        try {
            FileOutputStream fos = new FileOutputStream(file);
            fos.write(data.getBytes());
            fos.close();
            Toast.makeText(this, "Data written to SD Card!", Toast.LENGTH_SHORT).show();
        } catch (IOException e) {
            e.printStackTrace();
            Toast.makeText(this, "Error writing file!", Toast.LENGTH_SHORT).show();
        }
    } else {
        Toast.makeText(this, "SD Card not available!", Toast.LENGTH_SHORT).show();
    }
}
}

```