Develop an android application to insert and display student admission data in the database

// activity_main.xml

```
<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Students Form"
    android:textAlignment="center"
    android:textStyle="bold"
    android:padding="10dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />

<EditText
    android:id="@+id/name"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="Enter Name" />

<EditText
    android:id="@+id/email"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:inputType="textEmailAddress"
    android:hint="Enter Email" />

<EditText
    android:id="@+id/course"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="Enter Course" />

<Button
    android:id="@+id/submitButton"
    android:layout_gravity="center"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="20dp"
    android:text="Submit"/>

<Button
```

```
    android:id="@+id/viewStudentsButton"
    android:layout_gravity="center"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="20dp"
    android:text="View students"/>

// MainActivity.java

package com.tanmayvaij.crudapp;

import android.content.Intent;
import android.os.Bundle;
import android.widget.EditText;
import android.widget.Button;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    EditText name, email, course;
    Button submitButton, viewStudentsButton;

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

        DBHelper db = new DBHelper(MainActivity.this);
```

```
        name = findViewById(R.id.name);
        email = findViewById(R.id.email);
        course = findViewById(R.id.course);

        submitButton = findViewById(R.id.submitButton);
        viewStudentsButton = findViewById(R.id.viewStudentsButton);

        submitButton.setOnClickListener(v -> {

            db.insert(name.getText().toString(), email.getText().toString(), course.getText().toString());

            name.setText("");
            email.setText("");
            course.setText("");
        });

        viewStudentsButton.setOnClickListener(v -> {
            Intent intent = new Intent(getApplicationContext(), ViewStudentsActivity.class);
            startActivity(intent);
        });

    }
}

// activity_view_students.xml

<TextView
    android:id="@+id/textViewStudents"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"/>
```

// ViewStudentsActivity.java

```
package com.tanmayvaij.crudapp;

import android.os.Bundle; import android.widget.TextView;

import androidx.activity.EdgeToEdge; import androidx.appcompat.app.AppCompatActivity;

import java.util.ArrayList; import java.util.HashMap;

public class ViewStudentsActivity extends AppCompatActivity {

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    EdgeToEdge.enable(this);
    setContentView(R.layout.activity_view_students);

    DBHelper db = new DBHelper(ViewStudentsActivity.this);

    ArrayList<HashMap<String, String>> data = db.getData();

    StringBuilder students = new StringBuilder();

    data.forEach(obj -> {
        students.append("ID: ").append(obj.get("id")).append("\n");
        students.append("Name: ").append(obj.get("name")).append("\n");
        students.append("Email: ").append(obj.get("email")).append("\n");
        students.append("Course: ").append(obj.get("course")).append("\n\n");
    });

    TextView textView = findViewById(R.id.textViewStudents);
    if (students.length() > 0) textView.setText(students.toString());
    else textView.setText("No student records found.");

}


}
```

// DBHelper.java

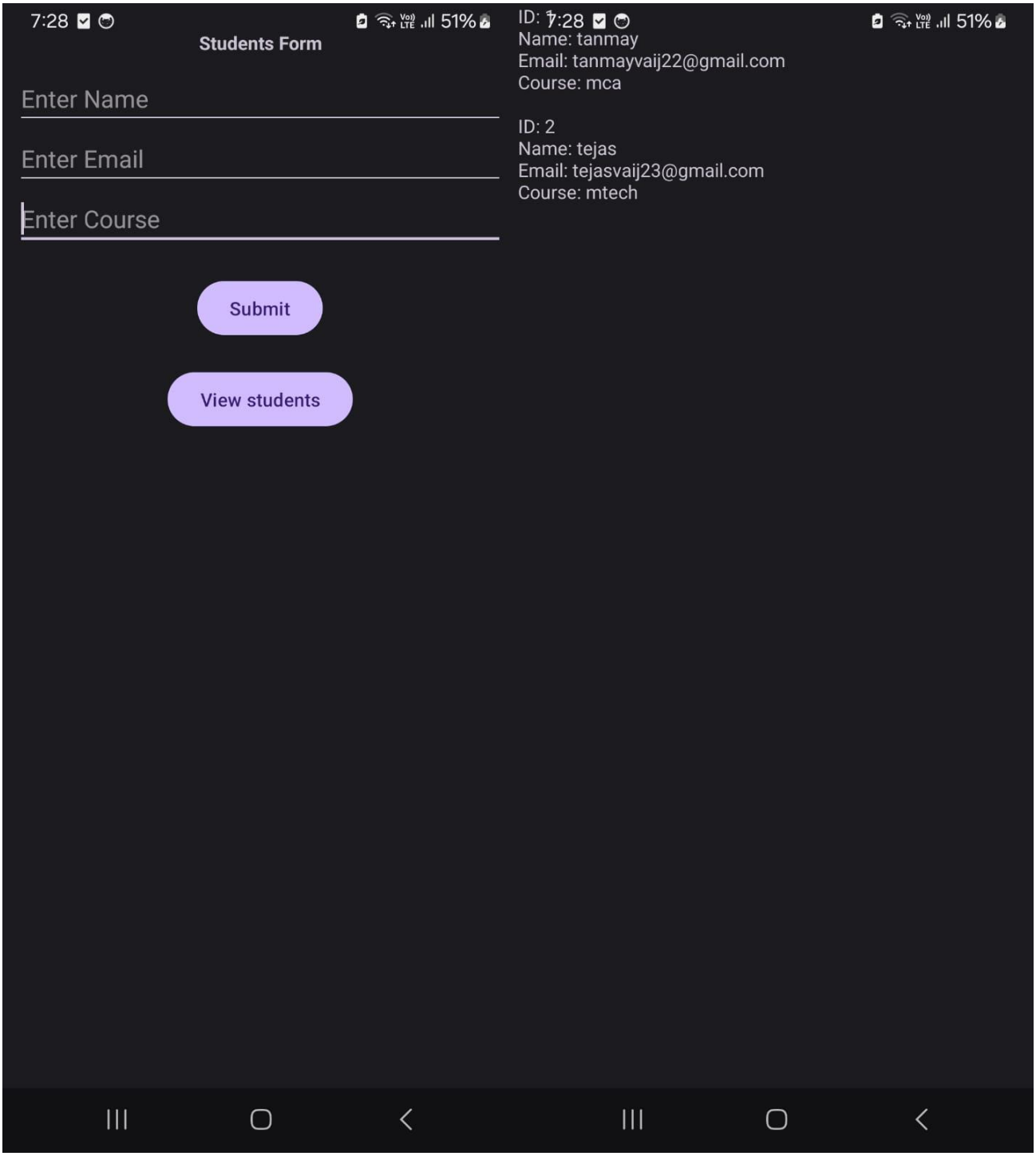
```
package com.tanmayvaij.crudapp;
```

```
import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;

import java.util.HashMap;
import java.util.ArrayList;

public class DBHelper extends SQLiteOpenHelper {

    private static final String DB_NAME = "university";
    private static final String TABLE_NAME = "student";

    private static final String ID = "id";
    private static final String NAME = "name";
    private static final String EMAIL = "email";
    private static final String COURSE = "course";

    public DBHelper(Context context) {
        super(context, DB_NAME, null, 1);
    }

    public void onCreate(SQLiteDatabase db) {
        String query = "CREATE TABLE " + TABLE_NAME + " ("
                + ID + " INTEGER PRIMARY KEY AUTOINCREMENT, "
                + NAME + " TEXT, "
                + EMAIL + " TEXT, "
                + COURSE + " TEXT )";
```

```
    db.execSQL(query);
}

public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
    db.execSQL("DROP TABLE IF EXISTS " + TABLE_NAME);
    onCreate(db);
}

public void insert(String name, String email, String course) {
    SQLiteDatabase db = this.getWritableDatabase();

    ContentValues values = new ContentValues();

    values.put(NAME, name);
    values.put(EMAIL, email);
    values.put(COURSE, course);

    db.insert(TABLE_NAME, null, values);

    db.close();
}

public ArrayList<HashMap<String, String>> getData() {

    ArrayList<HashMap<String, String>> data = new ArrayList<HashMap<String, String>>();

    SQLiteDatabase db = this.getReadableDatabase();

    Cursor cursor = db.rawQuery("SELECT * FROM " + TABLE_NAME , null);
```

```
        while (cursor.moveToNext()) {

            HashMap<String, String> obj = new HashMap<>();
            obj.put(ID, cursor.getString(0));
            obj.put(NAME, cursor.getString(1));
            obj.put(EMAIL, cursor.getString(2));
            obj.put(COURSE, cursor.getString(3));
            data.add(obj);
        }

        cursor.close();

        return data;
    }

}
```

Output:


7:28
51%
Students Form
Enter Name
Enter Email
Enter Course
Submit
View students
7:28
51%
ID: 1
Name: tanmay
Email: tanmayvaij22@gmail.com
Course: mca
ID: 2
Name: tejas
Email: tejasvaij23@gmail.com
Course: mtech

Develop a react native application display the inserted sports played details by the sports man

```
Import { useState } from "react";
import {
  SafeAreaView,
  Text,
  TextInput,
  View,
  Button,
  FlatList,
  StyleSheet
} from "react-native";

export default function App() {
  const [name, setName] = useState("");
  const [sport, setSport] = useState("");
  const [country, setCountry] = useState("");
  const [players, setPlayers] = useState([]);

  const addPlayer = () => {
    if (!name.trim() || !sport.trim() || !country.trim()) {
      alert("Please fill all fields!");
      return;
    }

    const newPlayer = {
      id: Date.now().toString(),
      name,
      sport,
      country,
    };
```

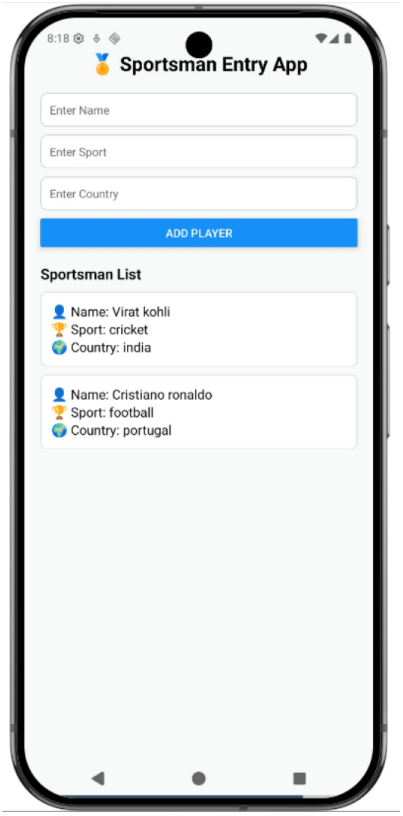
```
  setPlayers([...players, newPlayer]);
  setName("");
  setSport("");
  setCountry("");
};

return (
  <SafeAreaView style={styles.container}>
    <Text style={styles.heading}>🏅 Sportsman Entry App</Text>

    <View style={styles.form}>
      <TextInput
        style={styles.input}
        placeholder="Enter Name"
        value={name}
        onChangeText={setName}
      />
      <TextInput
        style={styles.input}
        placeholder="Enter Sport"
        value={sport}
        onChangeText={setSport}
      />
      <TextInput
        style={styles.input}
        placeholder="Enter Country"
        value={country}
        onChangeText={setCountry}
      />
      <Button title="Add Player" onPress={addPlayer} />
```

```
      </View>

      <Text style={styles.subHeading}>Sportsman List</Text>

      {players.length === 0 ? (
        <Text style={styles.noData}>No records yet.</Text>
      ) : (
        <FlatList
          data={players}
          keyExtractor={(item) => item.id}
          renderItem={({ item }) => (
            <View style={styles.card}>
              <Text style={styles.cardText}>👤 Name: {item.name}</Text>
              <Text style={styles.cardText}>🏆 Sport: {item.sport}</Text>
              <Text style={styles.cardText}>🌍 Country: {item.country}</Text>
            </View>
          )}
        />
      )}
    </SafeAreaView>
  );
}

const styles = StyleSheet.create({
  container: {
    flex: 1,
    backgroundColor: "#f8f9fa",
    padding: 20,
  },
  heading: {
```

```
  fontSize: 24,
  fontWeight: "700",
  textAlign: "center",
  marginVertical: 20,
},
form: {
  marginBottom: 20,
  gap: 10,
},
input: {
  borderWidth: 1,
  borderColor: "#ccc",
  padding: 10,
  borderRadius: 8,
  backgroundColor: "#fff",
},
subHeading: {
  fontSize: 18,
  fontWeight: "600",
  marginBottom: 10,
},
noData: {
  textAlign: "center",
  color: "#777",
  fontSize: 16,
},
card: {
  backgroundColor: "#fff",
  padding: 12,
  borderRadius: 8,
  marginBottom: 10,
```

```
    borderWidth: 1,
    borderColor: "#ddd",
  },
  cardText: { fontSize: 16 },
});
```

Output:



Develop a Dart Application to perform calculator operations.

```
import 'dart:io';

void main() { print("=== Simple Dart Calculator ==="); 

while (true) { print("\nChoose operation:"); print("1. Addition (+)"); print("2. Subtraction (-)"); print("3. Multiplication (*)"); print("4. Division (/)"); print("5. Exit");

stdout.write("Enter your choice (1-5): ");
String? choice = stdin.readLineSync();

if (choice == '5') {
  print("Exiting Calculator. Goodbye!");
  break;
}

stdout.write("Enter first number: ");
double num1 = double.parse(stdin.readLineSync()!);

stdout.write("Enter second number: ");
double num2 = double.parse(stdin.readLineSync()!);

switch (choice) {
  case '1':
    print("Result: $num1 + $num2 = ${num1 + num2}");
    break;
  case '2':
    print("Result: $num1 - $num2 = ${num1 - num2}");
    break;
  case '3':
    print("Result: $num1 * $num2 = ${num1 * num2}");
    break;
  case '4':
    if (num2 == 0) {
      print("Error: Division by zero is not allowed!");
    } else {
      print("Result: $num1 / $num2 = ${num1 / num2}");
    }
    break;
  default:
    print("Invalid choice! Please try again.");
}
}

}
```

Output:

=== Simple Dart Calculator ===

Choose operation:

1. Addition (+)

2. Subtraction (-)

3. Multiplication (*)

4. Division (/)

5. Exit

Enter your choice (1-5): 1

Enter first number: 4

Enter second number: 5

Result: 4.0 + 5.0 = 9.0