Aim

Create database using SQLite and perform INSERT and SELECT

CO5

Develop mobile applications using SQLite.

Procedure

Activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Enter the Details Below!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.108" />
    <EditText
        android:id="@+id/editTextTextPersonName"
```

```
    android:layout_width="wrap_content"

    android:layout_height="wrap_content"

    android:layout_marginStart="116dp"

    android:layout_marginTop="24dp"

    android:ems="10"

    android:inputType="textPersonName"

    android:hint="Enter Name Here"

    app:layout_constraintStart_toStartOf="parent"

    app:layout_constraintTop_toBottomOf="@+id/textView" />

<EditText

    android:id="@+id/editTextTextPersonName4"

    android:layout_width="wrap_content"

    android:layout_height="wrap_content"

    android:layout_marginStart="116dp"

    android:layout_marginTop="36dp"

    android:ems="10"

    android:inputType="textPersonName"

    android:hint="Enter contact Here"

    app:layout_constraintStart_toStartOf="parent"

    app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName" />

<EditText

    android:id="@+id/editTextTextPersonName5"

    android:layout_width="wrap_content"

    android:layout_height="wrap_content"

    android:layout_marginStart="116dp"

    android:layout_marginTop="40dp"

    android:ems="10"

    android:inputType="textPersonName"

    android:hint="Enter DOB"
```

```xml
        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName4" />

    <Button

        android:id="@+id/button5"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_marginStart="76dp"

        android:layout_marginTop="64dp"

        android:hint="Insert data"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName5" />

    <Button

        android:id="@+id/button7"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_marginStart="8dp"

        android:layout_marginTop="64dp"

        android:text="View Details"

        app:layout_constraintStart_toEndOf="@+id/button5"

        app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName5" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java

```java
package com.fb.insertview;

import androidx.appcompat.app.AlertDialog;

import androidx.appcompat.app.AppCompatActivity;


import android.database.Cursor;

import android.os.Bundle;
```

```java
import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    EditText name,age,contact;

    Button create1;

    DBHelper DB;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        name = (EditText) findViewById(R.id.editTextTextPersonName);

        age =(EditText) findViewById(R.id.editTextTextPersonName4);

        contact = (EditText) findViewById(R.id.editTextTextPersonName5);

        create1 = (Button) findViewById(R.id.button5);

        Button read = (Button)findViewById(R.id.button7);

        DB=new DBHelper(this);

        create1.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View v) {

                String nameTXT=name.getText().toString();

                String ageTXT=age.getText().toString();

                String contactTXT=contact.getText().toString();

                Boolean checkinsertdata = DB.insertuserdatas(nameTXT,ageTXT,contactTXT);

                if(checkinsertdata == true)

                {

            Toast.makeText(MainActivity.this, "data inserted", Toast.LENGTH_SHORT).show();

                }
```

```
            else
            {
       Toast.makeText(MainActivity.this, "failed to insert", Toast.LENGTH_SHORT).show();
            }
        }
    });
    read.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            Cursor res = DB.getdata();
            if(res.getCount()==0)
            {
          Toast.makeText(MainActivity.this, "no datas found", Toast.LENGTH_SHORT).show();
                return;
            }
            StringBuffer buffer = new StringBuffer();
            while(res.moveToNext())
            {
                buffer.append("name:"+res.getString(0)+"\n");
                buffer.append("age:"+res.getString(1)+"\n");
                buffer.append("contact:"+res.getString(2)+"\n\n\n");
            }
            AlertDialog.Builder builder = new AlertDialog.Builder(MainActivity.this);
            builder.setCancelable(true);
            builder.setTitle("user DEtails");
            builder.setMessage(buffer.toString());
            builder.show();
        }
    });
```

```
    }
}


DBHelper.java


package com.fb.insertview;

import android.content.ContentValues;

import android.content.Context;

import android.database.Cursor;

import android.database.sqlite.SQLiteDatabase;

import android.database.sqlite.SQLiteOpenHelper;

import androidx.annotation.Nullable;

public class DBHelper extends SQLiteOpenHelper {

    public DBHelper(Context context) {

        super(context, "user1.db",null, 1);

    }

    @Override

    public void onCreate(SQLiteDatabase db) {

        db.execSQL("create table studdetails (name TEXT primary key, age TEXT, contact
TEXT)");

    }

    @Override

    public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {

        db.execSQL("drop table if exists studdetails");

    }

    public Boolean insertuserdatas (String name, String age,String contact) {

        SQLiteDatabase DB = this.getWritableDatabase();

        ContentValues contentvalues = new ContentValues();

        contentvalues.put("name", name);

        contentvalues.put("age", age);
```

```java
        contentvalues.put("contact", contact);

        long result = DB.insert("studdetails", null, contentvalues);

        if (result==-1) {

            return false;

        } else {

            return true;

        }

    }

    public Cursor getdata()

    {

        SQLiteDatabase DB = this.getWritableDatabase();

        Cursor cursor = DB.rawQuery("select * from studdetails",null);

        return cursor;

    }

}
```
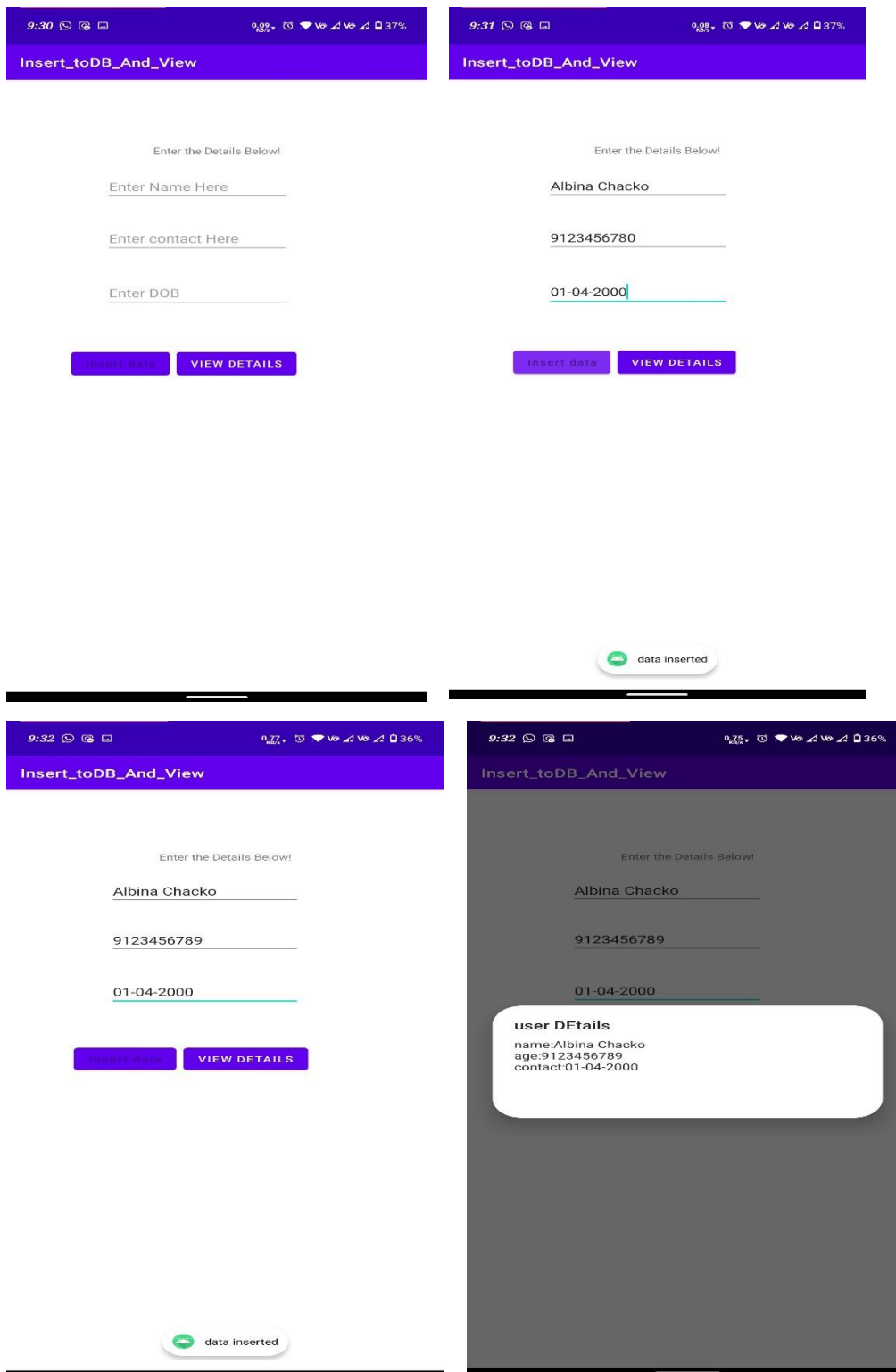
Output Screenshot

Result

The program was executed and the result was successfully obtained. Thus CO5 was obtained.