

COURSE OUTCOME 5

AIM : Create database using SQLite and perform INSERT , SELECT, UPDATE and DELETE on SQLite database

MainActivity.java	<pre>package com.example.sqliteapp; import androidx.appcompat.app.AlertDialog; import androidx.appcompat.app.AppCompatActivity; import android.database.Cursor; import android.os.Bundle; import android.view.View; import android.widget.Button; import android.widget.EditText; import android.widget.Toast; public class MainActivity extends AppCompatActivity { EditText name,contact,dob; Button insert,update,delete,view; DBHelper DB; @Override protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity_main); name=findViewById(R.id.editTextTextPersonName2); contact=findViewById(R.id.editTextTextPersonName2); dob=findViewById(R.id.editTextTextPersonName3); insert=findViewById(R.id.button); update=findViewById(R.id.button2); delete=findViewById(R.id.button3); view=findViewById(R.id.button4); DB=new DBHelper(this); insert.setOnClickListener(new View.OnClickListener() { @Override public void onClick(View view) { String nameTXT=name.getText().toString(); String contactTXT=contact.getText().toString(); String dobTXT=dob.getText().toString();</pre>
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```

        Boolean checkinsertdata
=DB.insertuserdata(nameTXT,contactTXT, dobTXT);
        if(checkinsertdata==true)
            Toast.makeText(MainActivity.this,"new data
inserted",Toast.LENGTH_LONG).show();
        else
            Toast.makeText(MainActivity.this,"new data
not inserted",Toast.LENGTH_LONG).show();
        }
    });

```

```

        update.setOnClickListener(new
View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String nameTXT=name.getText().toString();
                String contactTXT=contact.getText().toString();
                String dobTXT=dob.getText().toString();

```

```

                Boolean checkupdatedata
=DB.updateuserdata(nameTXT,contactTXT, dobTXT);
                if(checkupdatedata==true)
                    Toast.makeText(MainActivity.this," data
updated",Toast.LENGTH_LONG).show();
                else
                    Toast.makeText(MainActivity.this," data not
updated",Toast.LENGTH_LONG).show();
                }
            });

```

```

        delete.setOnClickListener(new
View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String nameTXT=name.getText().toString();

```

```

                Boolean checkdeletedata
=DB.deleteuserdata(nameTXT,null,null);
                if(checkdeletedata==true)
                    Toast.makeText(MainActivity.this," data
deleted",Toast.LENGTH_LONG).show();
                else

```

	<pre> Toast.makeText(MainActivity.this,"data not deleted",Toast.LENGTH_LONG).show(); } }); view.setOnClickListener(new View.OnClickListener() { @Override public void onClick(View view) { Cursor res=DB.getdata(); if(res.getCount()==0){ Toast.makeText(MainActivity.this, "NO ENTRY EXISTS", Toast.LENGTH_LONG).show(); return; } StringBuffer buffer=new StringBuffer(); while(res.moveToNext()){ buffer.append("Name:"+res.getString(0)+"\n"); buffer.append("Contact:"+res.getString(1)+"\n"); buffer.append("DOB:"+res.getString(2)+"\n\n"); } AlertDialog.Builder builder=new AlertDialog.Builder(MainActivity.this); builder.setTitle("User Details"); builder.setMessage(buffer.toString()); builder.show(); } }); } } </pre>
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DBHelper.java	<pre> package com.example.sqliteapp; 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; </pre>
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```

public class DBHelper extends SQLiteOpenHelper {
    public DBHelper(Context context) {
        super(context, "userdata.db", null, 1);
    }

    @Override
    public void onCreate(SQLiteDatabase DB) {
        DB.execSQL("create Table userdetails(name TEXT
primary key,contact TEXT ,dob TEXT)");
    }

    @Override
    public void onUpgrade(SQLiteDatabase DB, int i, int
il) {
        DB.execSQL("drop Table if exists userdetails");
    }

    public boolean insertuserdata(String name, String
contact, String dob) {
        SQLiteDatabase DB = this.getWritableDatabase();
        ContentValues contentValues = new ContentValues();
        contentValues.put("name", name);
        contentValues.put("contact", contact);
        contentValues.put("dob", dob);
        long result = DB.insert("userdetails", null,
contentValues);
        if (result == -1) {
            return false;
        } else {
            return true;
        }
    }

    public Boolean updateuserdata(String name, String
contact, String dob) {
        SQLiteDatabase DB = this.getWritableDatabase();
        ContentValues contentValues = new ContentValues();
        contentValues.put("contact", contact);
        contentValues.put("dob", dob);
        Cursor cursor = DB.rawQuery("Select * from
userdetails where name=?", new String[]{name});
        if (cursor.getCount() > 0) {
            long result = DB.update("userdetails",
contentValues, "name=?", new String[]{name});

```

```
        if (result == -1) {  
            return false;  
        } else {  
            return true;  
        }  
    } else {  
        return false;  
    }  
}
```

```
public Boolean deleteuserdata(String name, String  
contact, String dob) {  
    SQLiteDatabase DB = this.getWritableDatabase();  
    Cursor cursor = DB.rawQuery("Select * from  
userdetails where name =?", new String[]{name});  
    if (cursor.getCount() > 0) {  
        long result = DB.delete("userdetails", "name=?",  
new String[]{name});  
        if (result == -1) {  
            return false;  
        } else {  
            return true;  
        }  
    } else {  
        return false;  
    }  
}
```

```
public Cursor getdata() {  
    SQLiteDatabase DB = this.getWritableDatabase();  
    Cursor cursor = DB.rawQuery("Select * from  
userdetails ", null);  
    return cursor;  
}  
}
```

activity_main.xml	<pre> <?xml version="1.0" encoding="UTF-8"?> -<androidx.constraintlayout.widget.ConstraintLayout tools:context=".MainActivity" android:layout_height="match_parent" android:layout_width="match_parent" xmlns:tools="http://schemas.android.com/tools" xmlns:app="http://schemas.android.com/apk/res-auto" xmlns:android="http://schemas.android.com/apk/res/and roid"> <TextView android:layout_height="wrap_content" android:layout_width="wrap_content" app:layout_constraintVertical_bias="0.08" app:layout_constraintTop_toTopOf="parent" app:layout_constraintRight_toRightOf="parent" app:layout_constraintLeft_toLeftOf="parent" app:layout_constraintHorizontal_bias="0.416" app:layout_constraintBottom_toBottomOf="parent" android:textColor="@color/purple_500" android:textAppearance="@style/TextAppearance.AppC ompat.Display1" android:text="Enter Details Here!!!" android:id="@+id/textView"/> <EditText android:layout_height="wrap_content" android:layout_width="wrap_content" app:layout_constraintVertical_bias="0.204" app:layout_constraintTop_toTopOf="parent" app:layout_constraintHorizontal_bias="0.427" app:layout_constraintBottom_toBottomOf="parent" android:id="@+id/editTextTextPersonName" app:layout_constraintStart_toStartOf="parent" app:layout_constraintEnd_toEndOf="parent" android:inputType="textPersonName" android:hint="enter name" android:ems="10"/> <EditText android:layout_height="49dp" android:layout_width="197dp" app:layout_constraintVertical_bias="0.303" app:layout_constraintTop_toTopOf="parent" app:layout_constraintHorizontal_bias="0.401" app:layout_constraintBottom_toBottomOf="parent" android:id="@+id/editTextTextPersonName2" app:layout_constraintStart_toStartOf="parent" </pre>
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```
app:layout_constraintEnd_toEndOf="parent"
android:inputType="textPersonName"
android:hint="contact" android:ems="10"/>

<EditText android:layout_height="wrap_content"
android:layout_width="wrap_content"
app:layout_constraintVertical_bias="0.43"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintHorizontal_bias="0.427"
app:layout_constraintBottom_toBottomOf="parent"
android:id="@+id/editTextTextPersonName3"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintEnd_toEndOf="parent"
android:inputType="textPersonName"
android:hint="date of birth" android:ems="10"/>

<Button android:layout_height="wrap_content"
android:layout_width="wrap_content"
app:layout_constraintVertical_bias="0.556"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintHorizontal_bias="0.235"
app:layout_constraintBottom_toBottomOf="parent"
android:text="INSERT" android:id="@+id/button"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintEnd_toEndOf="parent"/>

<Button android:layout_height="wrap_content"
android:layout_width="wrap_content"
app:layout_constraintVertical_bias="0.556"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintHorizontal_bias="0.732"
app:layout_constraintBottom_toBottomOf="parent"
android:text="UPDATE" android:id="@+id/button2"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintEnd_toEndOf="parent"/>

<Button android:layout_height="53dp"
android:layout_width="103dp"
app:layout_constraintVertical_bias="0.676"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintHorizontal_bias="0.239"
app:layout_constraintBottom_toBottomOf="parent"
android:text="DELETE" android:id="@+id/button3"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintEnd_toEndOf="parent"/>
```


	<pre><Button android:layout_height="wrap_content" android:layout_width="wrap_content" app:layout_constraintVertical_bias="0.674" app:layout_constraintTop_toTopOf="parent" app:layout_constraintHorizontal_bias="0.735" app:layout_constraintBottom_toBottomOf="parent" android:text="VIEW" android:id="@+id/button4" app:layout_constraintStart_toStartOf="parent" app:layout_constraintEnd_toEndOf="parent"/> </androidx.constraintlayout.widget.ConstraintLayout></pre>
--	---

OUTPUT



Enter Details Here!!!

user2

575677

2/08/2020

INSERT

UPDATE

DELETE

VIEW

data deleted



Enter Details Here!!!

user

578897443

31/03/1999

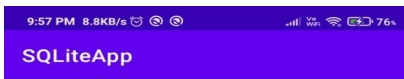
INSERT

UPDATE

DELETE

VIEW

new data inserted



Enter Details Here!!!

enter name

contact

date of birth

INSERT

UPDATE

DELETE

VIEW



Enter Details Here!!!

user2

575677

2/08/2020

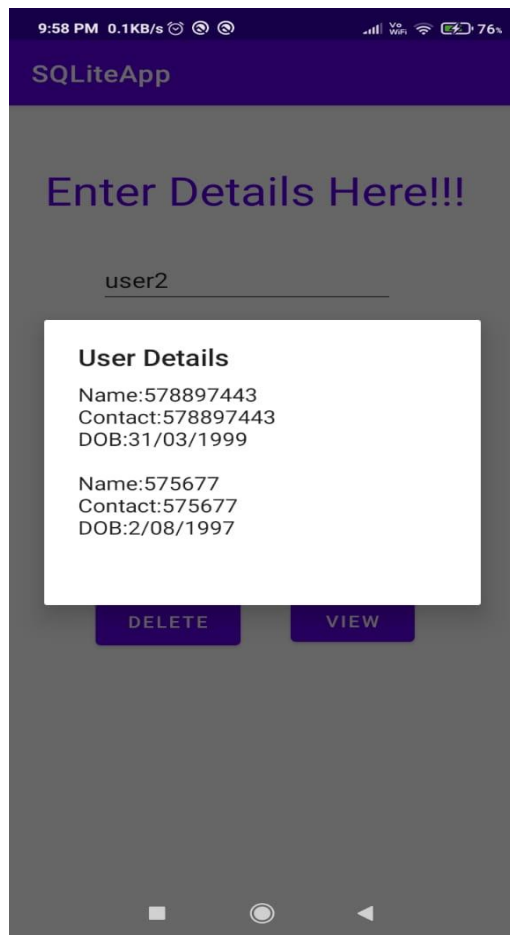
INSERT

UPDATE

DELETE

VIEW

data updated



RESULT

The program is successfully executed and the output is verified.