Experiment No.: 19

Aim

Perform UPDATE and DELETE on SQLite database

CO5

Develop mobile applications using SQLite.

Procedure

Main_activity.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"
  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="4dp"
    android:layout_marginTop="48dp"
    android:hint="Create"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName5" />
 <Button
    android:id="@+id/button6"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="8dp"
    android:layout_marginTop="48dp"
    android:text="Update"
app:layout_constraintStart_toEndOf="@+id/button5"
    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="48dp"
    android:text="Read"
    app:layout_constraintStart_toEndOf="@+id/button6"
    app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName5" />
 <Button
```

```
android:id="@+id/button8"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="4dp"
    android:layout_marginTop="48dp"
    android:text="Delete"
    app:layout_constraintStart_toEndOf="@+id/button7"
    app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName5" />
</androidx.constraintlayout.widget.ConstraintLayout>
MainActivity.java
package com.example.curdoperation;
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 create1;
  DBHelper DB;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
```

```
setContentView(R.layout.activity_main);
    name = (EditText) findViewById(R.id.editTextTextPersonName);
    contact =(EditText) findViewById(R.id.editTextTextPersonName4);
    dob = (EditText) findViewById(R.id.editTextTextPersonName5);
    create1 = (Button) findViewById(R.id.button5);
    Button update = (Button)findViewById(R.id.button6);
    Button delete = (Button)findViewById(R.id.button8);
    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 contactTXT=contact.getText().toString();
         String dobTXT=dob.getText().toString();
         Boolean checkinsertdata = DB.insertuserdatas(nameTXT,contactTXT,dobTXT);
         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();
         }});
    update.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
         String nameTXT=name.getText().toString();
```

```
String contactTXT=contact.getText().toString();
         String dobTXT=dob.getText().toString();
         Boolean checkupdatedata = DB.updateuserdatas(nameTXT,contactTXT,dobTXT);
         if(checkupdatedata == true)
         {
           Toast.makeText(MainActivity.this, "data updated",
Toast.LENGTH_SHORT).show();
         }
         else
         {
           Toast.makeText(MainActivity.this, "failed to update",
Toast.LENGTH_SHORT).show();
         }});
    delete.setOnClickListener(new View.OnClickListener() {
       @Override
      public void onClick(View v) {
         String nameTXT=name.getText().toString();
         Boolean checkdeletedata = DB.deleteuserdatas(nameTXT);
         if(checkdeletedata == true)
           Toast.makeText(MainActivity.this, "row deleted",
Toast.LENGTH_SHORT).show();
         else
           Toast.makeText(MainActivity.this, "failed to delete row",
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("contact:"+res.getString(1)+"\n");
            buffer.append("dob:"+res.getString(2)+"\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

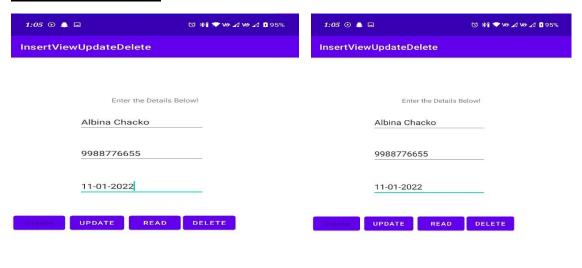
package com.example.curdoperation; import android.content.ContentValues; import android.content.Context; import android.database.Cursor;

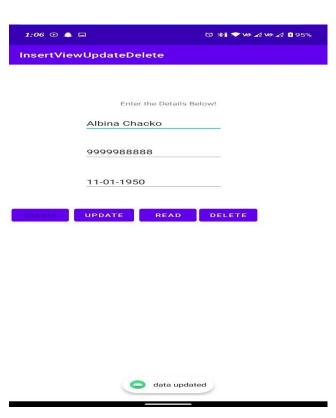
```
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
import androidx.annotation.Nullable;
public class DBHelper extends SQLiteOpenHelper {
  public DBHelper(Context context) {
    super(context, "userdata.db", null, 1);
  }
  @Override
  public void onCreate(SQLiteDatabase db) {
    db.execSQL("create table userdetails (name TEXT primary key, contact TEXT, dob
TEXT)");
@Override
  public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
    db.execSQL("drop table if exists userdetails");
  }
  public Boolean insertuserdatas (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;
```

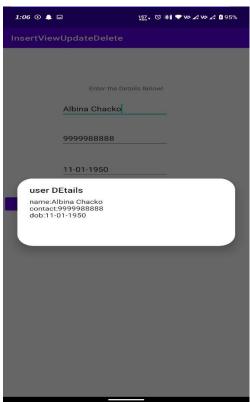
```
} else {
       return true;
     }
  }
  public Boolean updateuserdatas (String name, String contact, String dob) {
    SQLiteDatabase DB = this.getWritableDatabase();
    ContentValues contentvalues = new ContentValues();
    contentvalues.put("contact", contact);
    contentvalues.put("dob", dob);
    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 deleteuserdatas (String name) {
    SQLiteDatabase DB = this.getWritableDatabase();
    ContentValues contentvalues = new ContentValues();
    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;
}}
```

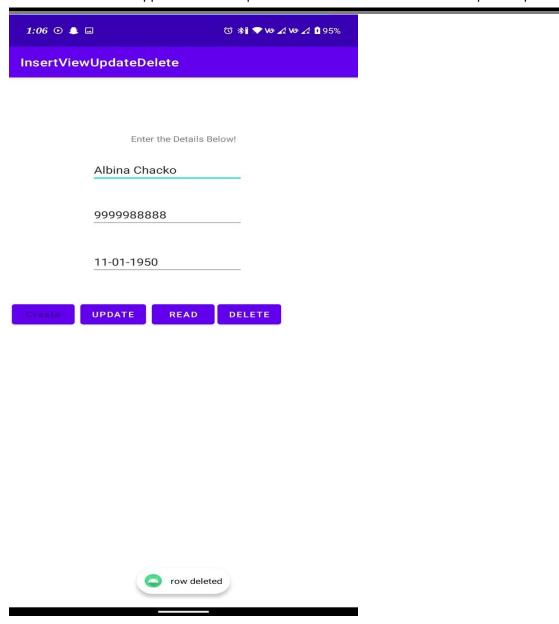
Output Screenshot







data inserted



Result

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