Experiment No. 10

Aim: a) Create an application that will create database to store username and password.

b) Create an application to insert, update and delete a record from the database.

Program:

- **Activity.xml :-**

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
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"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/et1"
        android:gravity="center"
        android:hint="Enter ID"/>
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/et2"
        android:gravity="center"
        android:hint="Enter Username"/>
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/et3"
        android:gravity="center"
        android:inputType="textPassword"
        android:hint="Enter Password"/>
    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:orientation="horizontal">
        <Button
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/bt1"
            android:text="INSERT"
            android:onClick="InsertData"
            android:layout_marginLeft="30dp"/>
```

```
        <Button
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/bt2"
            android:text="DELETE"
            android:onClick="DeleteData"
            android:layout_marginLeft="30dp"/>
        <Button
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/bt3"
            android:text="UPDATE"
            android:onClick="UpdateData"
            android:layout_marginLeft="30dp"/>
    </LinearLayout>

</LinearLayout>
```

- **MainActivity.java :-**

```
package com.example.sqlite;

import androidx.appcompat.app.AppCompatActivity;

import android.content.ContentValues;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
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 et1, et2, et3;
Button bt1, bt2, bt3;
String uid, uname, upass;
SQLiteDatabase db;
SQLiteOpenHelper helper;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        et1= findViewById(R.id.et1);
        et2= findViewById(R.id.et2);
        et3= findViewById(R.id.et3);
        bt1= findViewById(R.id.bt1);
        bt2= findViewById(R.id.bt2);
```

```
        bt3= findViewById(R.id.bt3);
        helper= new DbHelper(this);
    }


    public void InsertData(View view) {
        uid= et1.getText().toString();
        uname= et2.getText().toString();
        upass= et3.getText().toString();

        db= helper.getWritableDatabase();
        ContentValues values= new ContentValues();
        values.put(DbHelper.COL_1, uid);
        values.put(DbHelper.COL_2, uname);
        values.put(DbHelper.COL_3, upass);

        double result= db.insert(DbHelper.TABLE_NAME, null,
values);
        if(result==-1)
        {
            Toast.makeText(this, "Insertion failed",
Toast.LENGTH_SHORT).show();
        }
        else {
            Toast.makeText(this, "Insertion successful",
Toast.LENGTH_SHORT).show();
        }
    }

    public void DeleteData(View view) {
        uid= et1.getText().toString();
        uname= et2.getText().toString();
        upass= et3.getText().toString();

        db= helper.getWritableDatabase();
        ContentValues values= new ContentValues();
        values.put(DbHelper.COL_1, uid);
        values.put(DbHelper.COL_2, uname);
        values.put(DbHelper.COL_3, upass);

        double result= db.delete(DbHelper.TABLE_NAME,
DbHelper.COL_1+"=?",new String[]{uid});
        if(result==-1)
        {
            Toast.makeText(this, "Deletion failed",
Toast.LENGTH_SHORT).show();
        }
        else {
            Toast.makeText(this, "Deletion successful",
Toast.LENGTH_SHORT).show();
        }
```

```
    }

    public void UpdateData(View view) {
        uid= et1.getText().toString();
        uname= et2.getText().toString();
        upass= et3.getText().toString();

        db= helper.getWritableDatabase();
        ContentValues values= new ContentValues();
        values.put(DbHelper.COL_1, uid);
        values.put(DbHelper.COL_2, uname);
        values.put(DbHelper.COL_3, upass);

        double result= db.update(DbHelper.TABLE_NAME, values,
DbHelper.COL_1+"=?", new String[]{uid});
        if(result==-1)
        {
            Toast.makeText(this, "Updation failed",
Toast.LENGTH_SHORT).show();
        }
        else {
            Toast.makeText(this, "Updation successful",
Toast.LENGTH_SHORT).show();
        }
    }
}
```

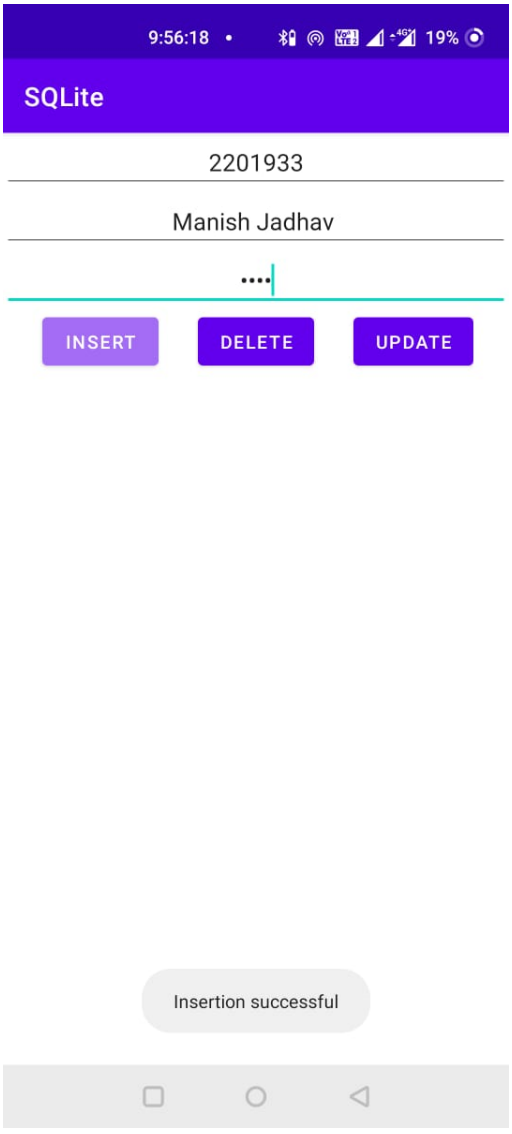
- **DbHelper.java :-**

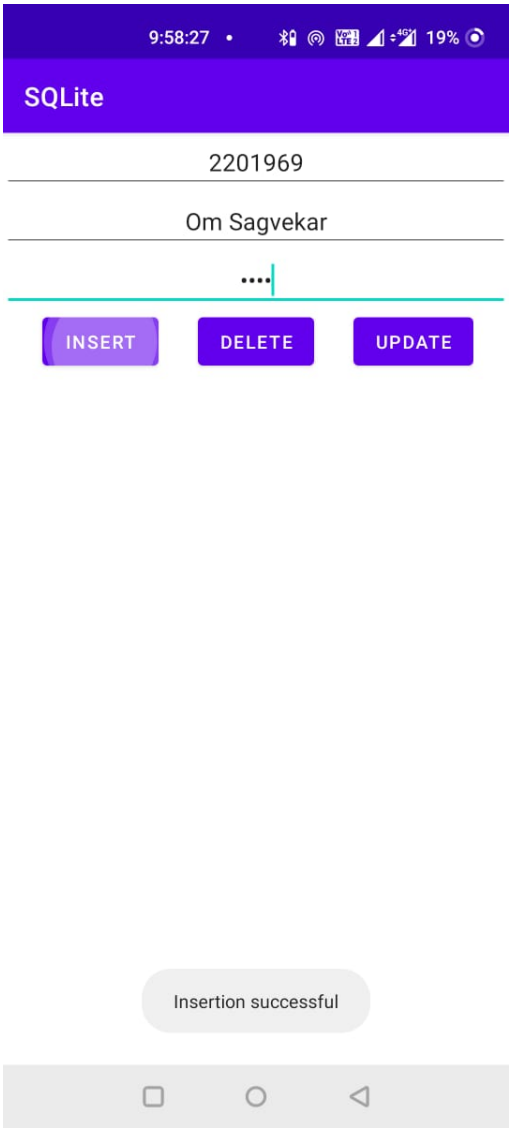
```
package com.example.sqlite;

import android.content.Context;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;

import androidx.annotation.Nullable;

public class DbHelper extends SQLiteOpenHelper {
    public static final String DATABASE_NAME= "USER_DATABASE";
    public static final String TABLE_NAME= "USER_TABLE";

    public static final String COL_1= "ID";
    public static final String COL_2= "NAME";
    public static final String COL_3= "PASSWORD";

    public DbHelper(@Nullable Context context) {
        super(context, DATABASE_NAME, null, 1);
    }

    @Override
```

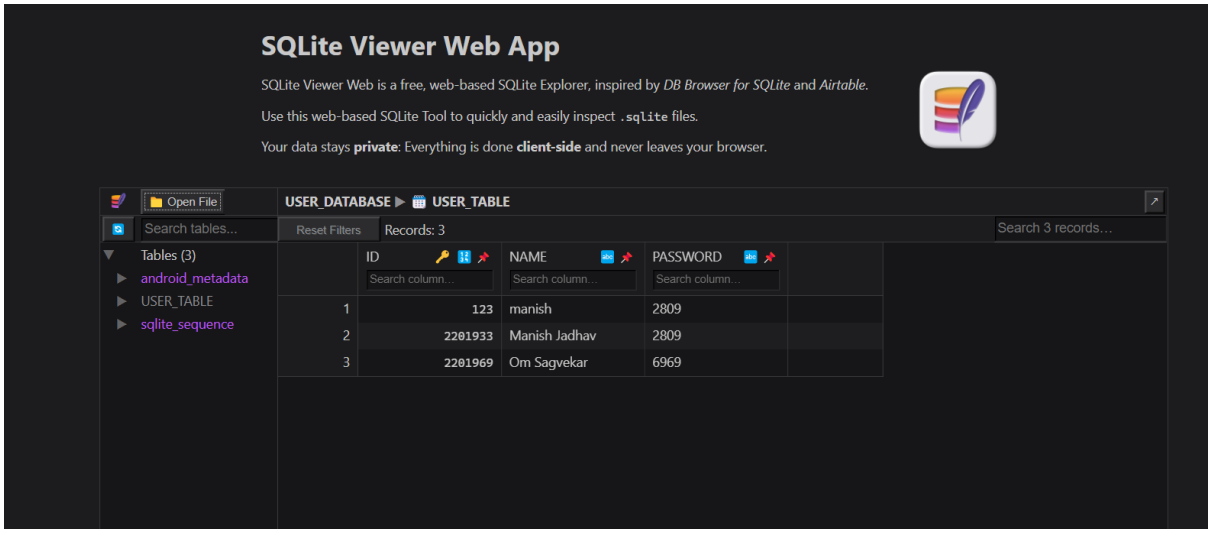
```
    public void onCreate(SQLiteDatabase db) {
        db.execSQL("CREATE TABLE USER_TABLE(ID INTEGER PRIMARY
KEY AUTOINCREMENT, NAME TEXT, PASSWORD TEXT)");
    }

    @Override
    public void onUpgrade(SQLiteDatabase db, int i, int i1) {
        db.execSQL("DROP TABLE IF EXISTS"+TABLE_NAME);
        onCreate(db);
    }
}
```

Output:

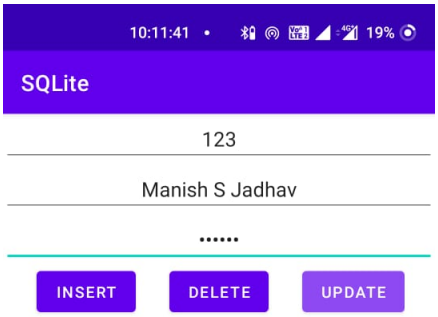
- **Inserting:**

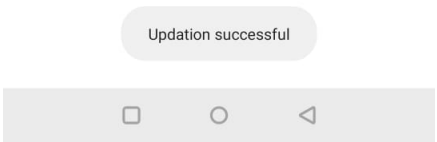


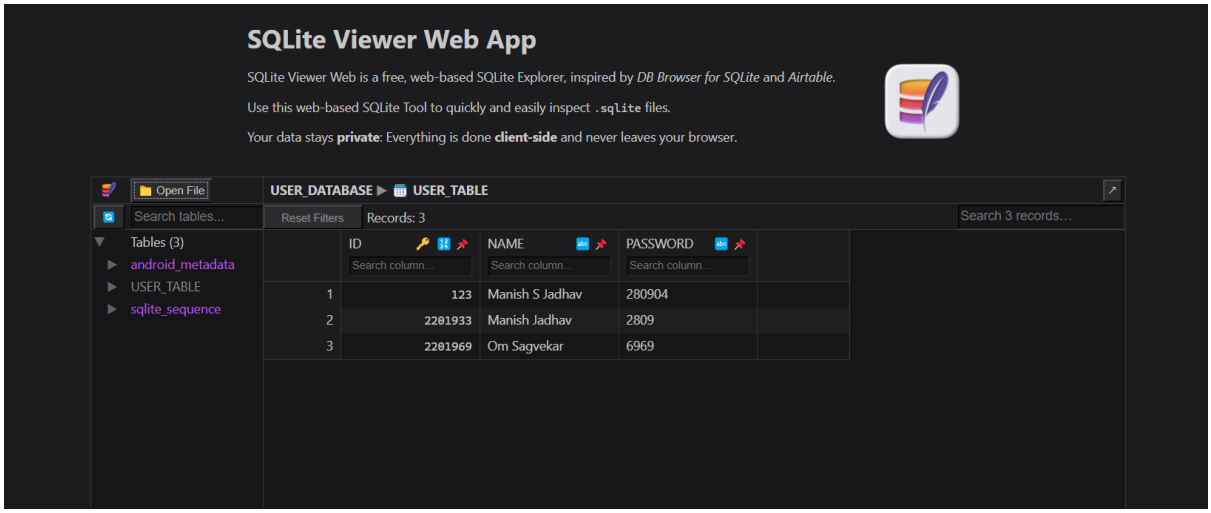



SQLite Viewer Web App
SQLite Viewer Web is a free, web-based SQLite Explorer, inspired by DB Browser for SQLite and Airtable.
Use this web-based SQLite Tool to quickly and easily inspect .sqlite files.
Your data stays private: Everything is done client-side and never leaves your browser.
Open File
USER_DATABASE ▶ USER_TABLE
Search tables...
Reset Filters
Records: 3
Search 3 records...
Tables (3)
android_metadata
USER_TABLE
sqlite_sequence
ID
NAME
PASSWORD
Search column...
1 123 manish 2809
2 2201933 Manish Jadhav 2809
3 2201969 Om Sagvekar 6969

- **Updating:**


10:11:41
19%
SQLite
123
Manish S Jadhav
INSERT
DELETE
UPDATE


Updation successful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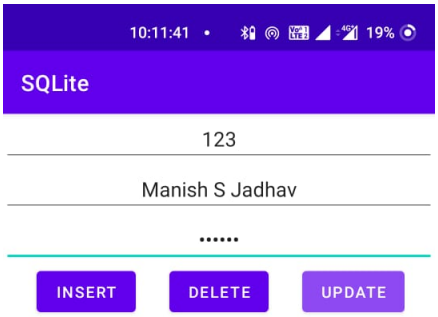
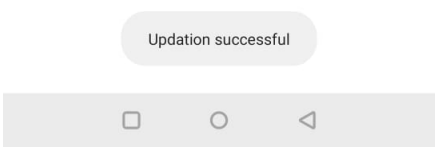
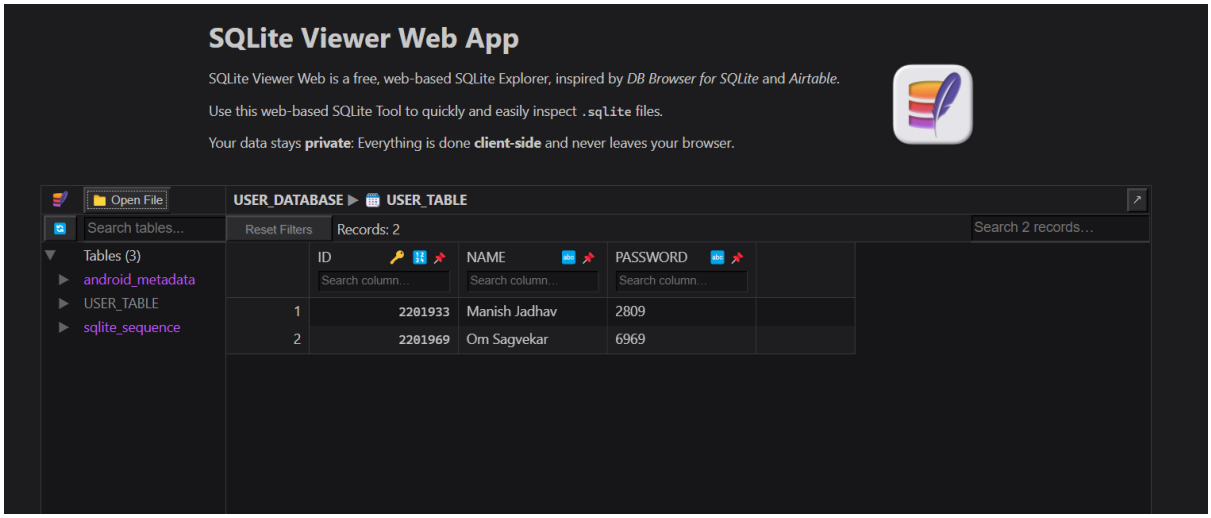
Search tables...
Reset Filters
Records: 3
Search 3 records...
Tables (3)
android_metadata
USER_TABLE
sqlite_sequence
ID
NAME
PASSWORD
Search column...
1 123 Manish S Jadhav 280904
2 2201933 Manish Jadhav 2809
3 2201969 Om Sagvekar 6969

- **Deleting:**


10:11:41
19%
SQLite
123
Manish S Jadhav
INSERT
DELETE
UPDATE


Updation successful



Conclusion:

Hence, by completing this experiment I came to know that how to Create a background application that will open activity on specific time.

Writeup & Oral (4)	Practical Performance (4)	Attendance (2)	Total (10)