

2. Create database using SQLite and perform INSERT and SELECT

3 Perform UPDATE and DELETE on SQLite database

```
package com.example.dbconnection;

import androidx.appcompat.app.AppCompatActivity;

import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
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 id,name,sal,dob;
    Button ins,srch,upd,clr,del;
    SQLiteDatabase db;

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

        id=(EditText) findViewById(R.id.etid);
        name=(EditText) findViewById(R.id.etname);
        sal=(EditText) findViewById(R.id.etsal);
        dob=(EditText) findViewById(R.id.etdob);
        ins=(Button) findViewById(R.id.btins);
        srch=(Button) findViewById(R.id.btsch);
        upd=(Button) findViewById(R.id.btup);
        clr=(Button) findViewById(R.id.btclr);
        del=(Button) findViewById(R.id.btdel);

        try {
            db = openOrCreateDatabase("empdb", MODE_PRIVATE, null);
            db.execSQL("Create table employee(id integer primary key,name
Text,sal Number,dob Date)");
        } catch (Exception e){

        }

        ins.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                try {
```

```

        db.execSQL("insert into employee values(" +
            id.getText().toString() + "," +
name.getText().toString() + "," +
            sal.getText().toString() + "," +
dob.getText().toString() + ")");
        Toast.makeText(getApplicationContext(),"Record Inserted
Successfully",Toast.LENGTH_SHORT).show();

    }catch(Exception e){
        Toast.makeText(getApplicationContext(),"Error in
Data",Toast.LENGTH_SHORT).show();}

    }
});

srch.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        String x=id.getText().toString();
        Cursor c=db.rawQuery("select * from employee where
id="+x,null);
        if(c.getCount()==0){
            Toast.makeText(getApplicationContext(),"No such
record",Toast.LENGTH_SHORT).show();
            clr.callOnClick();
            id.setText(x);
        }
        else{
            c.moveToFirst();
            clr.callOnClick();
            id.setText(x);
            name.setText(c.getString(1));
            sal.setText(c.getString(2));
            dob.setText(c.getString(3));
        }
    }
});

del.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        db.execSQL("delete from employee where
id="+id.getText().toString());
        Toast.makeText(getApplicationContext(),"Record Deleted
Successfully",Toast.LENGTH_SHORT).show();
    }
});

```

```

        upd.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                db.execSQL("update employee set
name='"+name.getText().toString()+"' ,sal='"+sal.getText().toString()+"' ,
dob='"+dob.getText().toString()+"' where id='"+id.getText());

                Toast.makeText(getApplicationContext(),"Record updated
Successfully",Toast.LENGTH_SHORT).show();
            }
        });

        clr.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                id.setText("");
                name.setText("");
                sal.setText("");
                dob.setText("");
                id.setText(""+getNextId());
            }
        });
        clr.callOnClick();
    }

    public int getNextId() {
        Cursor c = db.rawQuery("select max(id) as mid from employee ", null);
        c.moveToFirst();
        if (c.getString(0) == null)
            return 1;
        else {
            int x = Integer.parseInt(c.getString(0));
            return x + 1;
        }
    }

    protected void onDestroy() {
        db.close();
        super.onDestroy();
    }
}

```

Xml page:

```
<?xml version="1.0" encoding="utf-8"?>
```

```

<RelativeLayout 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:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="40dp"
        android:text="Enter ID:"
        android:textStyle="italic"
        android:textSize="24sp"
        android:id="@+id/tvid"/>

    <EditText
        android:id="@+id/etid"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_toRightOf="@+id/tvid"
        android:layout_marginTop="40dp"
        android:inputType="number"
        android:textStyle="italic"
        android:textSize="24sp"
        android:ems="10"
        android:text="" />

    <TextView
        android:id="@+id/tvname"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="10dp"
        android:layout_below="@+id/tvid"
        android:text="Enter Name:"
        android:textStyle="italic"
        android:textSize="24sp"
        />

    <EditText
        android:id="@+id/etname"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_toRightOf="@+id/tvname"
        android:layout_marginTop="10dp"
        android:layout_below="@+id/tvid"
        android:inputType="text"
        android:textStyle="italic"
        android:textSize="24sp"

```

```
        android:ems="10"
        android:text="" />
```

```
<TextView
    android:id="@+id/tvsal"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="10dp"
    android:layout_below="@+id/tvname"
    android:text="Enter salary:"
    android:textStyle="italic"
    android:textSize="24sp"
/>
```

```
<EditText
    android:id="@+id/etsal"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_toRightOf="@+id/tvsal"
    android:layout_marginTop="10dp"
    android:layout_below="@+id/tvname"
    android:inputType="number"
    android:textStyle="italic"
    android:textSize="24sp"
    android:ems="10"
    android:text="" />
```

```
<TextView
    android:id="@+id/tvdob"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="10dp"
    android:text="Enter Date of birth:"
    android:textStyle="italic"
    android:layout_below="@+id/tvsal"
    android:textSize="24sp"
/>
```

```
<EditText
    android:id="@+id/etdob"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/tvsal"
    android:layout_marginTop="10dp"
    android:layout_toRightOf="@+id/tvdob"
    android:ems="10"
    android:inputType="date"
    android:text=""
    android:textSize="24sp"
```

```

        android:textStyle="italic" />

<Button
    android:id="@+id/btins"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="15dp"
    android:layout_below="@+id/tvdob"
    android:text="INSERT" />

<Button
    android:id="@+id/btup"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/tvdob"
    android:layout_marginLeft="10dp"
    android:layout_marginTop="15dp"
    android:layout_toRightOf="@+id/btins"
    android:text="UPDATE" />

<Button
    android:id="@+id/btdel"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="15dp"
    android:layout_below="@+id/btins"
    android:text="DELETE" />

<Button
    android:id="@+id/btclr"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="15dp"
    android:layout_marginLeft="10dp"
    android:layout_below="@+id/btup"
    android:layout_toRightOf="@+id/btdel"
    android:text="CLEAR" />

<Button
    android:id="@+id/btsch"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginLeft="10dp"
    android:layout_marginTop="215dp"
    android:layout_toRightOf="@+id/btup"
    android:text="search" />

</RelativeLayout>

```



