

Create database using SQLite and perform INSERT and SELECT and Perform UPDATE and DELETE on SQLite database

MAIN ACTIVITY

```
package com.example.sqlite;

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 {
    SQLiteDatabase db;
    EditText id,name,salary,dob;
    Button insert,delete,update,clear,search;

    @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);
        salary = (EditText) findViewById(R.id.etsalary);
        dob = (EditText) findViewById(R.id.etsalary);
        insert = (Button) findViewById(R.id.btinsert);
        delete = (Button) findViewById(R.id.btdelete);
        update = (Button) findViewById(R.id.btupdate);
        clear = (Button) findViewById(R.id.btclean);
        search = (Button) findViewById(R.id.btsearch);
        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) {
        }

        insert.setOnClickListener(new View.OnClickListener()
        {
            @Override
            public void onClick(View v) {
                try {
                    db.execSQL("insert into employee values(" + id.getText().toString()
+ "," + name.getText().toString() + "," +
salary.getText().toString() + "," + dob.getText().toString() +
""); Toast.makeText(getApplicationContext(), "Record
Inserted Successfully", Toast.LENGTH_SHORT).show();
                }
            }
        });
    }
}
```

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    } catch (Exception e) {
    }

    id.setText("");
    name.setText("");
    salary.setText("");
    dob.setText("");
    }
});

search.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();
        clear.setOnClickListener();
        id.setText(x);
    } else {
        c.moveToFirst();
        clear.setOnClickListener();
        id.setText(x);
        name.setText(c.getString(1));
        salary.setText(c.getString(2));
        dob.setText(c.getString(3));
    }
    }
});

update.setOnClickListener(new View.OnClickListener()
{ @Override
public void onClick(View v) {
    db.execSQL("update employee set name='" +
name.getText().toString() + "',sal=" + salary.getText().toString()
+ ",dob='" + dob.getText().toString() + "'where id=" +
id.getText()); Toast.makeText(getApplicationContext(), "Record
Updated Successssfully", Toast.LENGTH_SHORT).show();
    }
});

delete.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 Successssfully", Toast.LENGTH_SHORT).show();
    }
});

clear.setOnClickListener(new View.OnClickListener()
{ @Override
public void onClick(View v) {
    id.setText("");
    name.setText("");
    salary.setText("");
    dob.setText("");
    id.setId(getNextID());
    }
}

```

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    });

    clear.setOnClickListener();
}
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;
    }
}

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

```

XML

```

<?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:id="@+id/tvid"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Enter id"
        android:layout_marginTop="50dp"
        android:textColor="@color/black"
        android:textSize="20dp"/>

    <EditText
        android:id="@+id/etid"
        android:layout_width="146dp"
        android:layout_height="wrap_content"
        android:layout_marginLeft="40dp"
        android:layout_marginTop="30dp"
        android:layout_toRightOf="@id/tvid"
        android:ems="10"
        android:inputType="number"
        android:text=""
        android:textSize="24sp"
        android:textStyle="bold" />

    <Button

```

```

        android:id="@+id/btsearch"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="50dp"
        android:layout_marginTop="50dp"
        android:layout_toRightOf="@id/etid"
        android:text="search" />

<TextView
    android:id="@+id/tvname"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="150dp"
    android:text="Enter Name"
    android:textColor="@color/black"    a
    android:textSize="20dp" />

<EditText
    android:id="@+id/etname"
    android:layout_width="wrap_content"    and
    android:layout_height="wrap_content"    androi
    android:layout_marginLeft="11dp"    android:layou
    android:layout_marginTop="150dp"    android:layout_toRig
    android:layout_toRightOf="@id/tvname"    android:ems="10"
    android:inputType="textPersonName"    a
    android:text="" />
<TextView
    android:id="@+id/tvsalary"
    android:layout_width="wrap_content"
    android:layout_height="wrap_conten
    t"    android:layout_marginTop="250dp"
    android:text="Enter Salary"
    android:textColor="@color/black
    "    android:textSize="20dp" />

<EditText
    android:id="@+id/etsalary"
    android:layout_width="wrap_content"    andro
    android:layout_height="wrap_content"    android:la
    android:layout_marginLeft="11dp"    android:layou
    android:layout_marginTop="250dp"    android:layout_toRightOf="@i
    android:layout_toRightOf="@id/tvsalary"    android:ems="10"
    android:inputType="textPersonName"    a
    android:text="" />
<TextView
    android:id="@+id/tvdob"
    android:layout_width="wrap_content"    an
    android:layout_height="wrap_content"    andr
    android:layout_marginTop="350dp"    android:te
    android:text="Enter DOB"
    android:textColor="@color/black"    a
    android:textSize="20dp" />

<EditText
    android:id="@+id/etdob"
    android:layout_width="wrap_content"    an
    android:layout_height="wrap_content"    andr
    android:layout_marginLeft="11dp"    android:la
    android:layout_marginTop="350dp"    android:layout_t
    android:layout_toRightOf="@id/tvdob"    android:ems="10"

```

```

        android:inputType="date"
        android:text="" />

        <Button
            android:id="@+id/btinsert"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginTop="450dp"
            android:text="insert" />
        <Button
            android:id="@+id/btdelete"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginTop="450dp"
            android:text="delete"
            android:layout_toRightOf="@id/btinsert"/>
        <Button
            android:id="@+id/btupdate"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginTop="550dp"
            android:text="update" />
        <Button
            android:id="@+id/btclear"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginTop="550dp"
            android:text="clear"
            android:layout_toRightOf="@id/btupdate"/>

    </RelativeLayout>

```

OUTPUT

