**Assignment:-11**

**Q.11 Create an application to make insert ,update,delete and retrieve operation on database?**

**Ans :- The Code for the above program**

**MainActivity.java**

package com.example.rakesh.database;

import android.annotation.SuppressLint;

import android.content.ContentValues;

import android.content.Intent;

import android.database.Cursor;

import android.database.SQLException;

import android.database.sqlite.SQLiteDatabase;

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

SQLiteDatabase db;

private Button save,upd,del,search;

private EditText stud\_id,stud\_name;

@SuppressLint("WrongConstant")

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_main*);

save= (Button)findViewById(R.id.*button*);

upd=(Button)findViewById(R.id.*update\_Btn*);

del=(Button)findViewById(R.id.*btnDel*);

stud\_id=(EditText)findViewById(R.id.*editText*);

stud\_name= (EditText)findViewById(R.id.*editText2*);

search = (Button)findViewById(R.id.*btnSearch*);

try{

db=openOrCreateDatabase("StudentDB",

SQLiteDatabase.*CREATE\_IF\_NECESSARY*,null);

db.execSQL("Create Table register(id text,name text)");

}catch(SQLException e)

{ Toast.*makeText*(getApplicationContext(),e.toString(),2000).show();

} save.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

if(stud\_id.getText().toString().equals("")

|| stud\_name.getText().toString().equals(""))

{

Toast.*makeText*(getApplicationContext(), "Both Values Are Mandatory", 2000).show();

}

else{

String student\_id = stud\_id.getText().toString();

String student\_name = stud\_name.getText().toString();

ContentValues values=new ContentValues();

values.put("id", student\_id);

values.put("name", student\_name);

if((db.insert("register", null, values))!=-1)

{

Toast.*makeText*(getApplicationContext(), "Record Successfully Inserted", 2000).show();

}

else

{

Toast.*makeText*(getApplicationContext(), "Insert Error", 2000).show();

}

stud\_name.setText("");

stud\_id.setText("");

Cursor c=db.rawQuery("SELECT \* FROM register",null);

c.moveToFirst();

while(!c.isAfterLast())

{

Toast.*makeText*(getApplicationContext(),c.getString(0)+ " "+c.getString(1),1000).show();

c.moveToNext();

}

c.close();

}

}

});

search.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Cursor c=db.rawQuery("select \* from register WHERE id='"+ stud\_id.getText()+"'",null);

c.moveToFirst();

while(!c.isAfterLast())

{

Toast.*makeText*(getApplicationContext(),c.getString(0)+ " "+c.getString(1),1000).show();

stud\_name.setText(c.getString(1));

c.moveToNext();

}

c.close();

}

});

upd.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

*// db.execSQL("delete from register");*

db.execSQL("UPDATE register SET name ='"+ stud\_name.getText().toString()+"' WHERE id ='"+stud\_id.getText().toString()+"'"); db.execSQL("UPDATE register SET name ='"+ stud\_name.getText().toString()+"' WHERE id ='"+stud\_id.getText().toString()+"'");

Toast.*makeText*(getApplicationContext(),"Record Updated Sucessfully",500).show();

}

});

del.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

db.execSQL("delete from register where id='"+stud\_id.getText()+"'");

Toast.*makeText*(getApplicationContext(),"Record Deleted Sucessfully",500).show();

}

});

}

}

**Activity\_main.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"**>

<**EditText**

**android:id="@+id/editText"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_alignParentTop="true"**

**android:layout\_centerHorizontal="true"**

**android:layout\_marginTop="77dp"**

**android:ems="10"**

**android:hint="Enter Student Id"**

**android:inputType="textPersonName"** />

<**EditText**

**android:id="@+id/editText2"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_alignParentTop="true"**

**android:layout\_centerHorizontal="true"**

**android:layout\_marginTop="146dp"**

**android:ems="10"**

**android:hint="Enter Student Name"**

**android:inputType="textPersonName"** />

<**Button**

**android:id="@+id/button"**

**android:layout\_width="198dp"**

**android:layout\_height="wrap\_content"**

**android:layout\_alignEnd="@+id/editText"**

**android:layout\_alignParentTop="true"**

**android:layout\_marginTop="245dp"**

**android:background="#fbb553"**

**android:text="Save"** />

<**Button**

**android:id="@+id/update\_Btn"**

**android:layout\_width="125dp"**

**android:layout\_height="wrap\_content"**

**android:layout\_alignParentStart="true"**

**android:layout\_alignTop="@+id/btnDel"**

**android:layout\_marginStart="69dp"**

**android:background="#a58ff5"**

**android:text="Update"** />

<**Button**

**android:id="@+id/btnDel"**

**android:layout\_width="111dp"**

**android:layout\_height="wrap\_content"**

**android:layout\_alignParentBottom="true"**

**android:layout\_alignParentEnd="true"**

**android:layout\_marginBottom="106dp"**

**android:layout\_marginEnd="46dp"**

**android:background="#8f9ef5"**

**android:text="Delete"** />

<**Button**

**android:id="@+id/btnSearch"**

**android:layout\_width="194dp"**

**android:layout\_height="wrap\_content"**

**android:layout\_alignEnd="@+id/editText"**

**android:layout\_alignParentBottom="true"**

**android:layout\_marginBottom="203dp"**

**android:background="@color/colorPrimaryDark"**

**android:text="Search"** />

</**RelativeLayout**>

**OUTPUT :**



