

Name: Suchithra Raj M
USN: 1NT19IS162

SQLiteOpenHelper

Mainactivity.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"
    android:layout_margin="10dp"
    tools:context=".MainActivity">
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter username"
        android:textSize="30dp"
        android:id="@+id/uname">
    </EditText>
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter password"
        android:textSize="30dp"
        android:id="@+id/upass">
    </EditText>
    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_gravity="center">
        <Button
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Login"

            android:id="@+id/login">
        </Button>
        <Button
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_marginLeft="10dp"
            android:text="Register"
            android:id="@+id/register">
        </Button>
    </LinearLayout>
</LinearLayout>
<LinearLayout
    android:layout_width="wrap_content"
```

```

        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_gravity="center">
        <Button
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Delete"
            android:id="@+id/delete">

    </Button>
    <Button
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginLeft="10dp"
        android:text="Update"
        android:id="@+id/update">
    </Button>
</LinearLayout>
<Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Display"
    android:id="@+id/display">
</Button>
<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/res"
    android:textSize="30dp">
</TextView>
</LinearLayout>

```

Welcome.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"
    android:gravity="center"
    tools:context=".welcome_page">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="WELCOME"
        android:textStyle="bold"
        android:gravity="center"
        android:textSize="30dp"></TextView>
</LinearLayout>

```

Mainactivity.java

```
package com.example.sqlite162;

import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.util.Log;
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 {
    EditText uname,upass;
    Button login,register,delete,display,update;
    TextView res;
    DbHelper mydbhelper;
    @Override

    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        uname=findViewById(R.id.uname);
        upass=findViewById(R.id.upass);
        login=findViewById(R.id.login);
        register=findViewById(R.id.register);
        delete=findViewById(R.id.delete);
        update=findViewById(R.id.update);
        display=findViewById(R.id.display);
        res=findViewById(R.id.res);
        register.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                mydbhelper=new DbHelper(MainActivity.this,"user",null,1);
                long

val=mydbhelper.addUser(uname.getText().toString(),upass.getText().toString())
;
                if(val==-1)
                {
                    Toast.makeText(MainActivity.this, "Error in adding the
user", Toast.LENGTH_SHORT).show();
                }
                else
                {
                    Toast.makeText(MainActivity.this, "User added
successfully", Toast.LENGTH_SHORT).show();
                }
            }
        });
        update.setOnClickListener(new View.OnClickListener() {
```

```

        @Override
        public void onClick(View view) {
            mydbhelper=new DbHelper(MainActivity.this,"user",null,1);

mydbhelper.update(uname.getText().toString(),upass.getText().toString());
            Toast.makeText(MainActivity.this, "User updated
successfully", Toast.LENGTH_SHORT).show();
        }
    });
    delete.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            mydbhelper=new DbHelper(MainActivity.this,"user",null,1);
            mydbhelper.deleteUser(uname.getText().toString());
            Toast.makeText(MainActivity.this, "User deleted
successfully", Toast.LENGTH_SHORT).show();
        }
    });
    display.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            mydbhelper=new DbHelper(MainActivity.this,"user",null,1);
            String result=mydbhelper.display(MainActivity.this);
            res.setText(result);
        }
    });
    login.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            mydbhelper=new DbHelper(MainActivity.this,"user",null,1);
            int

res=mydbhelper.check(MainActivity.this,uname.getText().toString(),upass.getTe
xt
                ().toString());
            if(res==1)
            {
                Intent it=new Intent(MainActivity.this,Welcome.class );
                startActivity(it);
            }
            else
            {
                Toast.makeText(MainActivity.this, "Username or password
is incorrect",

                Toast.LENGTH_SHORT).show();
            }
        }
    });
}
}
}

```

DbHelper.java

```
package com.example.sqlite162;

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 {
    private static final String dbName="userDB"; // Database Name
    //private static final String tbName="user" ; // Table Name
    private static final int dbVersion = 1 ;
    public DbHelper(@Nullable Context context, @Nullable String name,
@Nullable
        SQLiteDatabase.CursorFactory factory, int version) {
        super(context, dbName, null, dbVersion);
    }
    @Override
    public void onCreate(SQLiteDatabase db) {
        db.execSQL("create table user(username varchar(10),upass varchar(10));");
    }
    @Override
    public void onUpgrade(SQLiteDatabase db, int i, int i1) {
        db.execSQL("drop table if exists user;");
        onCreate(db);
    }
    public long addUser(String uname,String upass)
    {
        SQLiteDatabase myDb=this.getWritableDatabase();
        ContentValues cv=new ContentValues();
        cv.put("uname",uname);
        cv.put("upass",upass);
        long val=myDb.insert("user",null,cv);
        myDb.close();
        return val;
    }
    public void deleteUser(String uname)
    {
        SQLiteDatabase myDb=this.getWritableDatabase();
        myDb.execSQL("delete from user where uname='"+uname+"'");
        myDb.close();
    }
    public void update(String uname,String upass)
    {
        SQLiteDatabase myDb=this.getWritableDatabase();
        myDb.execSQL("update user set upass='"+upass+"' where
uname='"+uname+"'");
        myDb.close();
    }
    public String display(Context ctx)
```

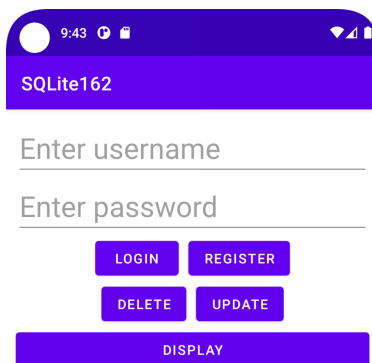
```

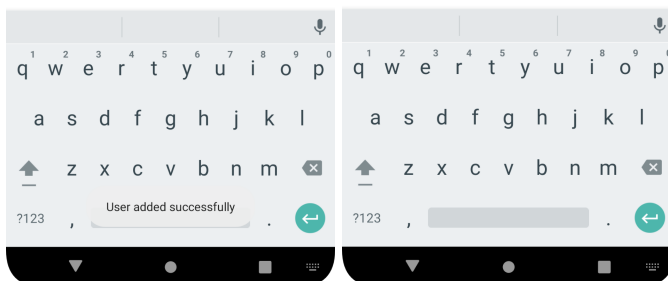
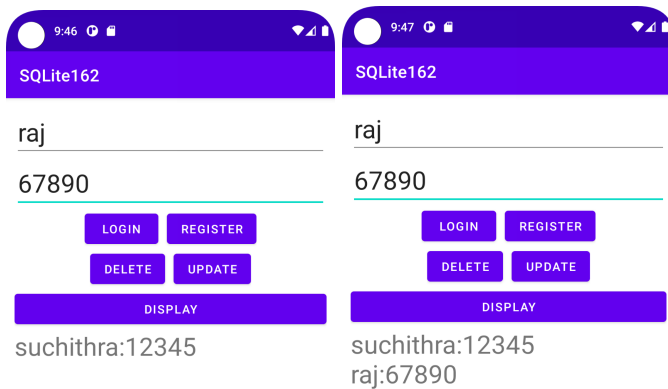
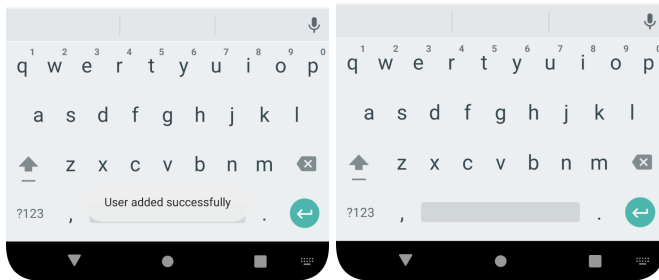
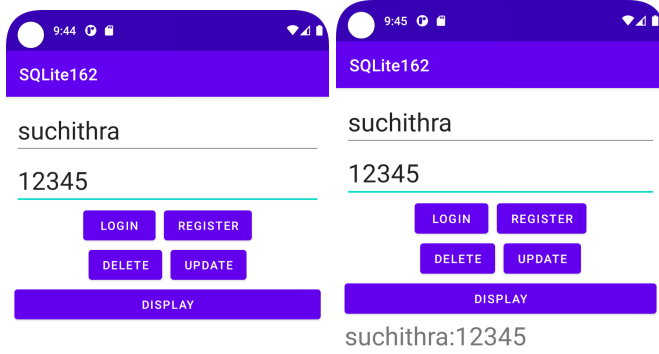
{
    SQLiteDatabase myDb=this.getReadableDatabase();
    String finalRes="";
    Cursor cursor=myDb.rawQuery("select * from user",null);
    while(cursor.moveToNext())
    {
        finalRes+= cursor.getString(0)+":"+cursor.getString(1)+"\n";
    }
    return finalRes;
}
public int check(Context ctx,String uname,String upass)

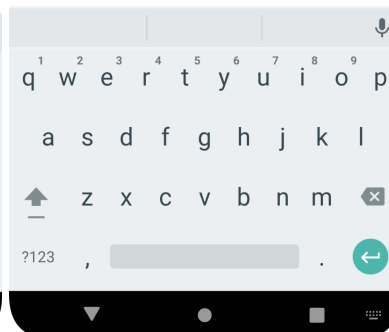
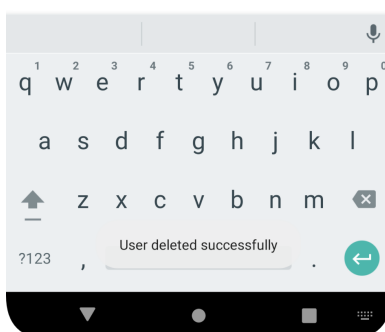
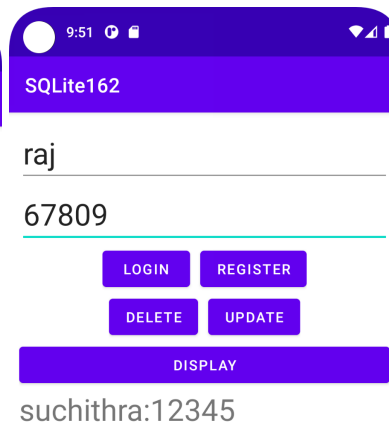
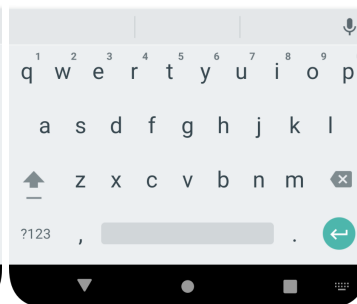
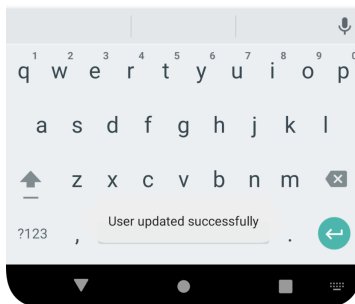
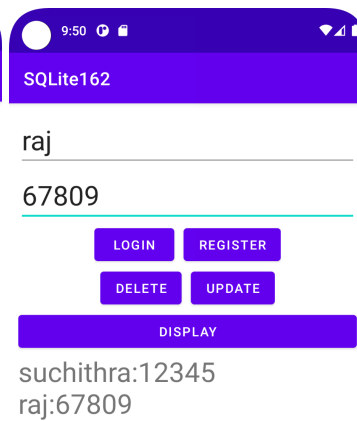
{
    SQLiteDatabase myDb=this.getReadableDatabase();
    Cursor cursor=myDb.rawQuery("select * from user",null);
    while(cursor.moveToNext())
    {
        if(uname.equals(cursor.getString(0)) &&
            upass.equals(cursor.getString(1)))
        {
            return 1;
        }
    }
    return -1;
}
}

```

OUTPUT:









WELCOME

