

1. Visiting Card

activity_main.xml

```
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"

    android:gravity="center"
    android:orientation="vertical"

    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:padding="18dip" >

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="D-Company "
            android:textStyle="italic"
            android:textSize="45sp"
            android:textColor="#4560FF" />

        <ImageView
            android:layout_width="81dp"
            android:layout_height="81dp"
            android:layout_marginBottom="5dip"
            android:src="@drawable/img" />

    </LinearLayout>

</View>
```

```
android:layout_width="360dp"
android:layout_height="2dp"
android:background="#4560FF" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="NAME: Darshan Prashanth"
    android:textSize="18sp"
    android:textColor="#4560FF" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Address: Bangalore"
    android:textSize="18sp"
    android:textColor="#4560FF" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Email ID: example@gmail.com"
    android:textSize="18sp"
    android:textColor="#4560FF" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Phone no: 9876543201"
    android:textSize="18sp"
    android:textColor="#4560FF" />
```

```
</LinearLayout>
```

2. Employee

activity_main.xml

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
```

android:layout_height="match_parent"

android:orientation="vertical"

android:gravity="center"

android:paddingBottom="@dimen/activity_vertical_margin"

android:paddingLeft="@dimen/activity_horizontal_margin"

android:paddingRight="@dimen/activity_horizontal_margin"

android:paddingTop="@dimen/activity_vertical_margin"

tools:context=".MainActivity" >

<TextView

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:text="Enter the Employee ID"

android:textStyle="bold"

android:textSize="18sp" />

<EditText

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:id="@+id/emp_id" />

<TextView

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:text="Enter the Employee name"

android:textStyle="bold"

android:textSize="18sp" />

<EditText

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:id="@+id/emp_name" />

<TextView

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:text="Enter the Employee age"

android:textStyle="bold"

android:textSize="18sp" />

```
<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/emp_age" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Enter the Employee address"
    android:textStyle="bold"
    android:textSize="18sp" />
```

```
<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/emp_addr" />
```

```
<LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:gravity="center" >
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="INSERT DATA"
    android:id="@+id/btn_insert" />
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Move to Search"
    android:id="@+id/btn_mts" />
```

```
</LinearLayout>
```

```
</LinearLayout>
```

search.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:gravity="center" >

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Enter the Employee ID"
        android:textStyle="bold" />

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/search_emp" />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Search"
        android:textStyle="bold"
        android:id="@+id/btn_search" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Employee Details"
        android:textStyle="bold"
        android:textSize="25sp"
        android:id="@+id/search_result" />

</LinearLayout>
```

My Database.java

```
package com.example.employeedb;

import android.content.Context;
```

```

import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteDatabase.CursorFactory;
import android.database.sqlite.SQLiteOpenHelper;

public class Mydatabase extends SQLiteOpenHelper{

    public Mydatabase(Context context, String name, CursorFactory factory, int
version) {
        super(context, name, factory, version);
        // TODO Auto-generated constructor stub
    }

    @Override
    public void onCreate(SQLiteDatabase arg0) {
        // TODO Auto-generated method stub
        arg0.execSQL("Create table Employee (id TEXT, name TEXT, age TEXT, addr
TEXT)");
    }

    @Override
    public void onUpgrade(SQLiteDatabase arg0, int arg1, int arg2) {
        // TODO Auto-generated method stub
    }
}

```

MainActivity.java

```

package com.example.employeeedb;

import android.os.Bundle;
import android.annotation.SuppressLint;
import android.app.Activity;
import android.content.ContentValues;
import android.content.Intent;
import android.database.sqlite.SQLiteDatabase;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

@SuppressLint("ShowToast")

```

```
public class MainActivity extends Activity implements OnClickListener{
```

```
    EditText empid, empname, empage, empaddr;
```

```
    Button btninsert, btnmts;
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
```

```
        setContentView(R.layout.activity_main);
```

```
        empid = (EditText) findViewById(R.id.emp_id);
```

```
        empname = (EditText) findViewById(R.id.emp_name);
```

```
        empage = (EditText) findViewById(R.id.emp_age);
```

```
        empaddr = (EditText) findViewById(R.id.emp_addr);
```

```
        btninsert = (Button) findViewById(R.id.btn_insert);
```

```
        btninsert.setOnClickListener(this);
```

```
        btnmts = (Button) findViewById(R.id.btn_mts);
```

```
        btnmts.setOnClickListener(this);
```

```
    }
```

```
    @Override
```

```
    public boolean onCreateOptionsMenu(Menu menu) {
```

```
        // Inflate the menu; this adds items to the action bar if it is present.
```

```
        getMenuInflater().inflate(R.menu.main, menu);
```

```
        return true;
```

```
    }
```

```
    @Override
```

```
    public void onClick(View arg0) {
```

```
        // TODO Auto-generated method stub
```

```
        if(arg0.equals(btninsert))
```

```
        {
```

```
            String eid = empid.getText().toString();
```

```
            String ename = empname.getText().toString();
```

```
            String eage = empage.getText().toString();
```

```
            String eaddr = empaddr.getText().toString();
```

```
            Mydatabase dat = new Mydatabase(this, "Employee.db", null, 1);
```

```
            SQLiteDatabase database = dat.getWritableDatabase();
```

```
            ContentValues cv = new ContentValues();
```

```
            cv.put("id", eid);
```

```

        cv.put("name", ename);
        cv.put("age", eage );
        cv.put("addr", eaddr);
        database.insert("Employee", null, cv); database.close();

        Toast.makeText(this, "Employee Data Insterted", 15000).show();

    }
    else if(arg0.equals(btnmts))
    {
        Intent it = new Intent(this, SearchActivity.class);
        startActivity(it);
    }
}
}

```

SearchActivity.java

```

package com.example.employeeedb;

import android.annotation.SuppressLint;
import android.app.Activity;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;

public class SearchActivity extends Activity implements OnClickListener{

    Button btnsearch;
    TextView searchresult;
    EditText searchemp;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        // TODO Auto-generated method stub
    }
}

```



```

        super.onCreate(savedInstanceState);
        setContentView(R.layout.search);

        btnsearch = (Button) findViewById(R.id.btn_search);
        btnsearch.setOnClickListener(this);
        searchresult = (TextView) findViewById(R.id.search_result);
        searchemp = (EditText) findViewById(R.id.search_emp);
    }

    @SuppressWarnings("ShowToast")
    @Override
    public void onClick(View arg0) {
        // TODO Auto-generated method stub
        String eid = searchemp.getText().toString();
        Mydatabase dat = new Mydatabase(this, "Employee.db", null, 1);
        SQLiteDatabase db = dat.getReadableDatabase();
        String[] columns = new String[] {"id","name","age","addr"};
        String where = "id = ?";
        String[] values = new String[] {eid.trim()};
        Cursor cu = db.query("Employee", columns, where, values, null, null, null);

        if(cu.moveToNext())
        {
            searchresult.setText(" ");
            String id = cu.getString(0);
            String name = cu.getString(1);
            String age = cu.getString(2);
            String addr = cu.getString(3);
            searchresult.setText(id + "\n" + name + "\n" + age + "\n" + addr + "\n");
        }
        else
        {
            Toast.makeText(getApplicationContext(), "Employee ID not Found",
15000).show();
        }
    }

}

AndroiManifest.xml
<activity android:name = "SearchActivity"> </activity>

```

3. File Operation

activity_main.xml

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
```

```
    android:orientation="vertical"
    android:gravity="center"
```

```
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >
```

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:gravity="center" >
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Create File"
    android:textSize="20sp"
    android:id="@+id/create_file" />
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Open File"
    android:textSize="20sp"
    android:id="@+id/open_file" />
```

```
</LinearLayout>
```

```
<EditText
```

```
    android:layout_width="match_parent"
    android:layout_height="275dp"
    android:text="File Contents"
    android:id="@+id/display" />
```

```
<Button
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Save File"
    android:textSize="20sp"
    android:id="@+id/save_file" />
```

```
</LinearLayout>
```

MainActivity.java

```
package com.example.fileoperations;
```

```
import java.io.BufferedReader;
import java.io.FileInputStream;
import java.io.FileNotFoundException;
import java.io.FileOutputStream;
import java.io.IOException;
import java.io.InputStreamReader;
```

```
import android.os.Bundle;
import android.app.Activity;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
```

```
public class MainActivity extends Activity implements OnClickListener{
```

```
    Button btn_create, btn_open, btn_save;
    EditText text_display;
    String FILE_NAME = "example.txt";
```

```
@Override
```

```
protected void onCreate(Bundle savedInstanceState) {
```

```

super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);

btn_create = (Button) findViewById(R.id.create_file);
btn_create.setOnClickListener(this);
btn_open = (Button) findViewById(R.id.open_file);
btn_open.setOnClickListener(this);
text_display = (EditText) findViewById(R.id.display);
btn_save = (Button) findViewById(R.id.save_file);
btn_save.setOnClickListener(this);
}

@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.main, menu);
    return true;
}

@Override
public void onClick(View arg0) {
    // TODO Auto-generated method stub
    if(arg0.equals(btn_create))
    {
        String entry = text_display.getText().toString();
        FileOutputStream fos = null;
        try {
            fos = openFileOutput(FILE_NAME, MODE_PRIVATE);
            fos.write(entry.getBytes());
            text_display.getText().clear();
            Toast.makeText(getApplicationContext(), getFilesDir() + FILE_NAME,
3500).show();
            fos.close();
        }
        catch (FileNotFoundException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
        }
        catch (IOException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
        }
    }
}

```

```

    }
}

else if(arg0.equals(btn_open))
{
    FileInputStream fis = null;
    try {
        fis = openFileInput(FILE_NAME);
        InputStreamReader isr = new InputStreamReader(fis);
        BufferedReader br = new BufferedReader(isr);
        StringBuilder sb = new StringBuilder();
        String areatext;

        while((areatext = br.readLine()) != null)
        {
            sb.append(areatext).append("\n");
        }
        text_display.setText(sb.toString());
        fis.close();
    }
    catch (FileNotFoundException e) {
        // TODO Auto-generated catch block
        e.printStackTrace();
    }
    catch (IOException e) {
        // TODO Auto-generated catch block
        e.printStackTrace();
    }
}
else if(arg0.equals(btn_save))
{
    String entry = text_display.getText().toString();
    FileOutputStream fos = null;
    try {
        fos = openFileOutput(FILE_NAME, MODE_PRIVATE);
        fos.write(entry.getBytes());
        text_display.getText().clear();
        Toast.makeText(getApplicationContext(), getFilesDir() + FILE_NAME,
3500).show();
        fos.close();
    }
}

```

```

        catch (FileNotFoundException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
        }
        catch (IOException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
        }
    }
}
}

```

5.Counter

activity_main.xml

```

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"

    android:orientation="vertical"
    android:gravity="center"

    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"

```

```
    android:text="Counter"
    android:textStyle="bold"
    android:textSize="25sp"
    android:layout_marginBottom="10dp"
    android:id="@+id/counter" />
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="START"
    android:id="@+id/start" />
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="STOP"
    android:id="@+id/stop" />
```

```
</LinearLayout>
```

MainActivity.java

```
package com.example.counter;
```

```
import android.os.Bundle;
import android.os.Handler;
import android.os.Message;
import android.app.Activity;
import android.view.Menu;
import android.view.View;
```

```
import android.view.View.OnClickListener;
```

```
import android.widget.Button;
```

```
import android.widget.TextView;
```

```
public class MainActivity extends Activity implements OnClickListener, Runnable{
```

```
    TextView txtcounter;
```

```
    Button btn_start, btn_stop;
```

```
    int i=0;
```

```
    Thread thread;
```

```
    Boolean running=false;
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
```

```
        setContentView(R.layout.activity_main);
```

```
        btn_start = (Button) findViewById(R.id.start);
```

```
        btn_start.setOnClickListener(this);
```

```
        btn_stop = (Button) findViewById(R.id.stop);
```

```
        btn_stop.setOnClickListener(this);
```

```
        txtcounter = (TextView) findViewById(R.id.counter);
```

```
    }
```

```
    @Override
```

```
    public boolean onCreateOptionsMenu(Menu menu) {
```

```
        // Inflate the menu; this adds items to the action bar if it is present.
```

```
        getMenuInflater().inflate(R.menu.main, menu);
```



```

        return true;
    }

@Override
public void onClick(View arg0) {
    // TODO Auto-generated method stub
    //i=0;
    if(arg0.equals(btn_start))
    {
        //i=0;
        running = true;
        thread = new Thread(this);
        thread.start();
    }
    else if(arg0.equals(btn_stop))
    {
        running = false;
    }
}

```

```

@Override
public void run() {
    // TODO Auto-generated method stub
    while(i < 100 && running == true)
    {
        try
        {
            thread.sleep(1000);
        }
    }
}

```

```

        catch(Exception e)
        {
            System.out.println(e);
        }
        hand.sendMessage(i);
        i++;
    }

}

Handler hand = new Handler()
{
    public void handleMessage(Message m)
    {
        txtcounter.setText(" " + m.what);
    }
};
}

```

8. Calculator

Server

AndroidManifest.xml

```

<service android:name="MyCalcService" >
    <intent-filter>
        <action android:name="com.example.calc"/>
    </intent-filter>
</service>

```

MyCalcService.java

```
package com.example.server;
```

```
import com.example.calc.Calculator;
```

```
import android.app.Service;
```

```
import android.content.Intent;
```

```
import android.os.IBinder;
```

```
import android.os.RemoteException;
```

```
public class MyCalcService extends Service{
```

```
    @Override
```

```
    public IBinder onBind(Intent arg0) {
```

```
        // TODO Auto-generated method stub
```

```
        return stub;
```

```
    }
```

```
    Calculator.Stub stub = new Calculator.Stub()
```

```
    {
```

```
        @Override
```

```
        public int add(int a, int b) throws RemoteException
```

```
        {
```

```
            return a+b;
```

```
        }
```

```
        @Override
```

```
        public int sub(int a, int b) throws RemoteException
```

```
        {
```

```
            return a-b;
```

```
        }
```

```

        @Override
        public int mul(int a, int b) throws RemoteException
        {
            return a*b;
        }

        @Override
        public int div(int a, int b) throws RemoteException
        {
            return a/b;
        }
    };
}

```

Calculator.aidl

```
package com.example.calc;
```

```

interface Calculator {
    int add(int a, int b);
    int sub(int a, int b);
    int mul(int a, int b);
    int div(int a, int b);
}

```

Client

activity_main.xml

```

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"

```

android:orientation="vertical"

android:gravity="center"

android:paddingBottom="@dimen/activity_vertical_margin"

android:paddingLeft="@dimen/activity_horizontal_margin"

android:paddingRight="@dimen/activity_horizontal_margin"

android:paddingTop="@dimen/activity_vertical_margin"

tools:context=".MainActivity" >

<TextView

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:text="Enter the first number"

android:textStyle="bold"

android:textSize="20sp" />

<EditText

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:id="@+id/num_1" />

<TextView

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:text="Enter the second number"

android:textStyle="bold"

android:textSize="20sp" />

<EditText

```
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:id="@+id/num_2" />
```

<LinearLayout

```
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:orientation="horizontal"  
    android:gravity="center" >
```

<Button

```
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Add"  
    android:id="@+id/btn_add" />
```

<Button

```
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Sub"  
    android:id="@+id/btn_sub" />
```

<Button

```
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Mul"  
    android:id="@+id/btn_mul" />
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Div"
    android:id="@+id/btn_div" />
```

```
</LinearLayout>
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Result"
    android:id="@+id/calc_res"
    android:textStyle="bold"
    android:textSize="20sp" />
```

```
</LinearLayout>
```

MainActivity.java

```
package com.example.client;
```

```
import com.example.calc.Calculator;
```

```
import android.os.Bundle;
```

```
import android.os.IBinder;
```

```
import android.os.RemoteException;
```

```
import android.app.Activity;
```

```
import android.content.ComponentName;
```

```
import android.content.Intent;
import android.content.ServiceConnection;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;
```

```
public class MainActivity extends Activity implements OnClickListener, ServiceConnection{
```

```
    Button btnadd, btnsub, btnmul, btndiv;
```

```
    EditText num1, num2;
```

```
    TextView calcre;
```

```
    Calculator calc;
```

```
@Override
```

```
protected void onCreate(Bundle savedInstanceState) {
```

```
    super.onCreate(savedInstanceState);
```

```
    setContentView(R.layout.activity_main);
```

```
    btnadd = (Button) findViewById(R.id.btn_add);
```

```
    btnadd.setOnClickListener(this);
```

```
    btnsub = (Button) findViewById(R.id.btn_sub);
```

```
    btnsub.setOnClickListener(this);
```

```
    btnmul = (Button) findViewById(R.id.btn_mul);
```

```
    btnmul.setOnClickListener(this);
```

```
    btndiv = (Button) findViewById(R.id.btn_div);
```



```

        btndiv.setOnClickListener(this);

        num1 = (EditText) findViewById(R.id.num_1);
        num2 = (EditText) findViewById(R.id.num_2);
        calcres = (TextView) findViewById(R.id.calc_res);

        bindService(new Intent("com.example.calc"), this, BIND_AUTO_CREATE);
    }

```

@Override

```

public boolean onCreateOptionsMenu(Menu menu) {

    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.main, menu);
    return true;
}

```

@Override

```

public void onClick(View arg0) {

    // TODO Auto-generated method stub

    String num_a = num1.getText().toString();
    num_b = num2.getText().toString();
    int n1 = Integer.parseInt(num_a);
    int n2 = Integer.parseInt(num_b);

    if(arg0.equals(btnadd))
    {
        try {

            int res = calc.add(n1, n2);

            calcres.setText(String.valueOf(res));

        } catch (RemoteException e) {

```

```
        // TODO Auto-generated catch block
        e.printStackTrace();
    }
}
else if(arg0.equals(btnsub))
{
    try {
        int res = calc.sub(n1, n2);
        calcres.setText(String.valueOf(res));
    } catch (RemoteException e) {
        // TODO Auto-generated catch block
        e.printStackTrace();
    }
}
else if(arg0.equals(btnmul))
{
    try {
        int res = calc.mul(n1, n2);
        calcres.setText(String.valueOf(res));
    } catch (RemoteException e) {
        // TODO Auto-generated catch block
        e.printStackTrace();
    }
}
else if(arg0.equals(btndiv))
{
    try {
        int res = calc.div(n1, n2);
        calcres.setText(String.valueOf(res));
    }
```

```

        } catch (RemoteException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
        }
    }
}

@Override
public void onServiceConnected(ComponentName arg0, IBinder arg1) {
    // TODO Auto-generated method stub
    Toast.makeText(getBaseContext(), "Connected to Server", 5000).show();
    calc = (Calculator) Calculator.Stub.asInterface(arg1);
}

@Override
public void onServiceDisconnected(ComponentName arg0) {
    // TODO Auto-generated method stub
}
}

```

9. Dial Pad

activity_main.xml

```

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"

    android:orientation="vertical"
    android:gravity="center"

    android:paddingBottom="@dimen/activity_vertical_margin"

```

```
android:paddingLeft="@dimen/activity_horizontal_margin"
android:paddingRight="@dimen/activity_horizontal_margin"
android:paddingTop="@dimen/activity_vertical_margin"
tools:context=".MainActivity" >
```

```
<LinearLayout
```

```
    android:orientation="horizontal"
    android:gravity="center"
    android:layout_width = "match_parent"
    android:layout_height="wrap_content">
```

```
<EditText
```

```
    android:layout_width="125dp"
    android:layout_height="wrap_content"
    android:id="@+id/txt_num" />
```

```
<Button
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Del"
    android:id="@+id/btn_del"/>
```

```
</LinearLayout>
```

```
<LinearLayout
```

```
    android:orientation="horizontal"
    android:gravity="center"
    android:layout_width = "match_parent"
    android:layout_height="wrap_content">
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text=" 1 "
    android:id="@+id/btn_1"/>
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text=" 2 "
    android:id="@+id/btn_2"/>
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text=" 3 "
    android:id="@+id/btn_3"/>
```

```
</LinearLayout>
```

```
<LinearLayout
    android:orientation="horizontal"
    android:gravity="center"
    android:layout_width = "match_parent"
    android:layout_height="wrap_content">
```

```
<Button
    android:layout_width="wrap_content"
```

```
android:layout_height="wrap_content"
android:text=" 4 "
android:id="@+id/btn_4"/>
```

<Button

```
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text=" 5 "
android:id="@+id/btn_5"/>
```

<Button

```
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text=" 6 "
android:id="@+id/btn_6"/>
```

</LinearLayout>

<LinearLayout

```
android:orientation="horizontal"
android:gravity="center"
android:layout_width = "match_parent"
android:layout_height="wrap_content">
```

<Button

```
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text=" 7 "
android:id="@+id/btn_7"/>
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text=" 8 "
    android:id="@+id/btn_8"/>
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text=" 9 "
    android:id="@+id/btn_9"/>
```

```
</LinearLayout>
```

```
<LinearLayout
    android:orientation="horizontal"
    android:gravity="center"
    android:layout_width = "match_parent"
    android:layout_height="wrap_content">
```

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text=" # "
    android:id="@+id/btn_ash"/>
```

```
<Button
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
    android:text=" 0 "
    android:id="@+id/btn_0"/>
```

```
<Button
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text=" * "
    android:id="@+id/btn_star"/>
```

```
</LinearLayout>
```

```
<LinearLayout
```

```
    android:orientation="horizontal"
    android:gravity="center"
    android:layout_width = "match_parent"
    android:layout_height="wrap_content">
```

```
<Button
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Save to Contacts"
    android:id="@+id/btn_save"/>
```

```
<Button
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Call"
    android:id="@+id/btn_call"/>
```

```
</LinearLayout>
```

```
</LinearLayout>
```


MainActivity.java

```
package com.example.keypad;
```

```
import android.net.Uri;
```

```
import android.os.Bundle;
```

```
import android.provider.ContactsContract;
```

```
import android.app.Activity;
```

```
import android.content.Intent;
```

```
import android.view.Menu;
```

```
import android.view.View;
```

```
import android.view.View.OnClickListener;
```

```
import android.widget.Button;
```

```
import android.widget.EditText;
```

```
public class MainActivity extends Activity implements OnClickListener{
```

```
    EditText txtnum;
```

```
    Button btndel, btn1, btn2, btn3, btn4, btn5, btn6, btn7, btn8, btn9, btnash, btn0,  
    btnstar, btnsave, btncall;
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
```

```
        setContentView(R.layout.activity_main);
```

```
        txtnum = (EditText) findViewById(R.id.txt_num);
```

```
        btndel = (Button) findViewById(R.id.btn_del);
```

```
        btndel.setOnClickListener(this);
```

```
btn1 = (Button) findViewById(R.id.btn_1);
btn1.setOnClickListener(this);
btn2 = (Button) findViewById(R.id.btn_2);
btn2.setOnClickListener(this);
btn3 = (Button) findViewById(R.id.btn_3);
btn3.setOnClickListener(this);
btn4 = (Button) findViewById(R.id.btn_4);
btn4.setOnClickListener(this);
btn5 = (Button) findViewById(R.id.btn_5);
btn5.setOnClickListener(this);
btn6 = (Button) findViewById(R.id.btn_6);
btn6.setOnClickListener(this);
btn7 = (Button) findViewById(R.id.btn_7);
btn7.setOnClickListener(this);
btn8 = (Button) findViewById(R.id.btn_8);
btn8.setOnClickListener(this);
btn9 = (Button) findViewById(R.id.btn_9);
btn9.setOnClickListener(this);
btnash = (Button) findViewById(R.id.btn_ash);
btnash.setOnClickListener(this);
btn0 = (Button) findViewById(R.id.btn_0);
btn0.setOnClickListener(this);
btnstar = (Button) findViewById(R.id.btn_star);
btnstar.setOnClickListener(this);
btnsave = (Button) findViewById(R.id.btn_save);
btnsave.setOnClickListener(this);
btncall = (Button) findViewById(R.id.btn_call);
btncall.setOnClickListener(this);
```

```
}
```

```
@Override
```

```
public boolean onCreateOptionsMenu(Menu menu) {  
    // Inflate the menu; this adds items to the action bar if it is present.  
    getMenuInflater().inflate(R.menu.main, menu);  
    return true;  
}
```

```
@Override
```

```
public void onClick(View arg0) {  
    // TODO Auto-generated method stub  
    if(arg0.equals(btn1))  
    {  
        txtnum.append("1");  
    }  
    else if(arg0.equals(btn2))  
    {  
        txtnum.append("2");  
    }  
    else if(arg0.equals(btn3))  
    {  
        txtnum.append("3");  
    }  
    else if(arg0.equals(btn4))  
    {  
        txtnum.append("4");  
    }  
    else if(arg0.equals(btn5))  
    {
```

```
        txtnum.append("5");
    }
    else if(arg0.equals(btn6))
    {
        txtnum.append("6");
    }
    else if(arg0.equals(btn7))
    {
        txtnum.append("7");
    }
    else if(arg0.equals(btn8))
    {
        txtnum.append("8");
    }
    else if(arg0.equals(btn9))
    {
        txtnum.append("9");
    }
    else if(arg0.equals(btn0))
    {
        txtnum.append("0");
    }
    else if(arg0.equals(btnash))
    {
        txtnum.append("#");
    }
    else if(arg0.equals(btnstar))
    {
        txtnum.append("*");
    }
}
```

```
}  
else if(arg0.equals(btndel))  
{  
    String num = txtnum.getText().toString();  
    if(num.length()>0)  
    {  
        num = num.substring(0, num.length()-1);  
    }  
    txtnum.setText(num);  
}  
else if(arg0.equals(btncall))  
{  
    String num = txtnum.getText().toString();  
    Intent it = new Intent(Intent.ACTION_CALL);  
    it.setData(Uri.parse("tel:" + num));  
    startActivity(it);  
}  
else if(arg0.equals(btnsave))  
{  
    String num = txtnum.getText().toString();  
    Intent it1 = new Intent(Intent.ACTION_INSERT,  
ContactsContract.Contacts.CONTENT_URI);  
    it1.putExtra(ContactsContract.Intents.Insert.PHONE, num);  
    startActivity(it1);  
}  
}  
}
```

10. Json

example.json

```
[  
  { "name" : "Bangalore",  
    "lat" : "12.45",  
    "long" : "10.35",  
    "temperature" : "26C",  
    "humidity" : "35"  
  },  
  { "name" : "Mysuru",  
    "lat" : "11.05",  
    "long" : "10.05",  
    "temperature" : "24C",  
    "humidity" : "25"  
  }  
]
```

activity_main.xml

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
  xmlns:tools="http://schemas.android.com/tools"  
  android:layout_width="match_parent"  
  android:layout_height="match_parent"  
  
  android:orientation="vertical"  
  android:gravity="center"  
  
  android:paddingBottom="@dimen/activity_vertical_margin"
```

```
        android:paddingLeft="@dimen/activity_horizontal_margin"
        android:paddingRight="@dimen/activity_horizontal_margin"
        android:paddingTop="@dimen/activity_vertical_margin"
        tools:context=".MainActivity" >
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="parse JSON file"
        android:id="@+id/parse_file" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="JSON file contents"
        android:textStyle="bold"
        android:textSize="25sp"
        android:id="@+id/display" />
</LinearLayout>
```

MainActivity.java

```
package com.example.jsondisplay;
```

```
import java.io.IOException;
```

```
import java.io.InputStream;
```

```
import org.json.JSONArray;
```

```
import org.json.JSONException;
```

```
import org.json.JSONObject;
```

```
import android.os.Bundle;
```

```
import android.app.Activity;
```

```
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.TextView;

public class MainActivity extends Activity implements OnClickListener{

    Button btn_parse_file;
    TextView text_display;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        btn_parse_file = (Button) findViewById(R.id.parse_file);
        btn_parse_file.setOnClickListener(this);
        text_display = (TextView) findViewById(R.id.display);
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        // Inflate the menu; this adds items to the action bar if it is present.
        getMenuInflater().inflate(R.menu.main, menu);
        return true;
    }

    @Override
```



```

public void onClick(View arg0) {
    // TODO Auto-generated method stub
    if(arg0.equals(btn_parse_file))
    {
        try
        {
            InputStream is = getAssets().open("example.json");
            int size = is.available();
            byte[] buffer = new byte[size];
            is.read(buffer);
            is.close();

            String json = new String(buffer, "UTF-8");
            JSONArray jsonArray = new JSONArray(json);
            text_display.setText(" ");

            for(int i = 0; i<jsonArray.length(); i++)
            {
                JSONObject obj =jsonArray.getJSONObject(i);

                text_display.setText(text_display.getText() + "\n Name: " +
obj.getString("name")+ "\n");

                text_display.setText(text_display.getText() + " Latitude: " +
obj.getString("lat")+ "\n");

                text_display.setText(text_display.getText() + " Longitude: " +
obj.getString("long")+ "\n");

                text_display.setText(text_display.getText() + " Temperature: " +
obj.getString("temperature")+ "\n");

                text_display.setText(text_display.getText() + " Humidity: " +
obj.getString("humidity")+ "\n");

                text_display.setText(text_display.getText() + "\n-----" + "\n");
            }
        }
    }
}

```

```
}  
catch (IOException e)  
{  
    // TODO Auto-generated catch block  
    e.printStackTrace();  
}  
catch (JSONException e)  
{  
    // TODO Auto-generated catch block  
    e.printStackTrace();  
}  
}  
}  
}
```