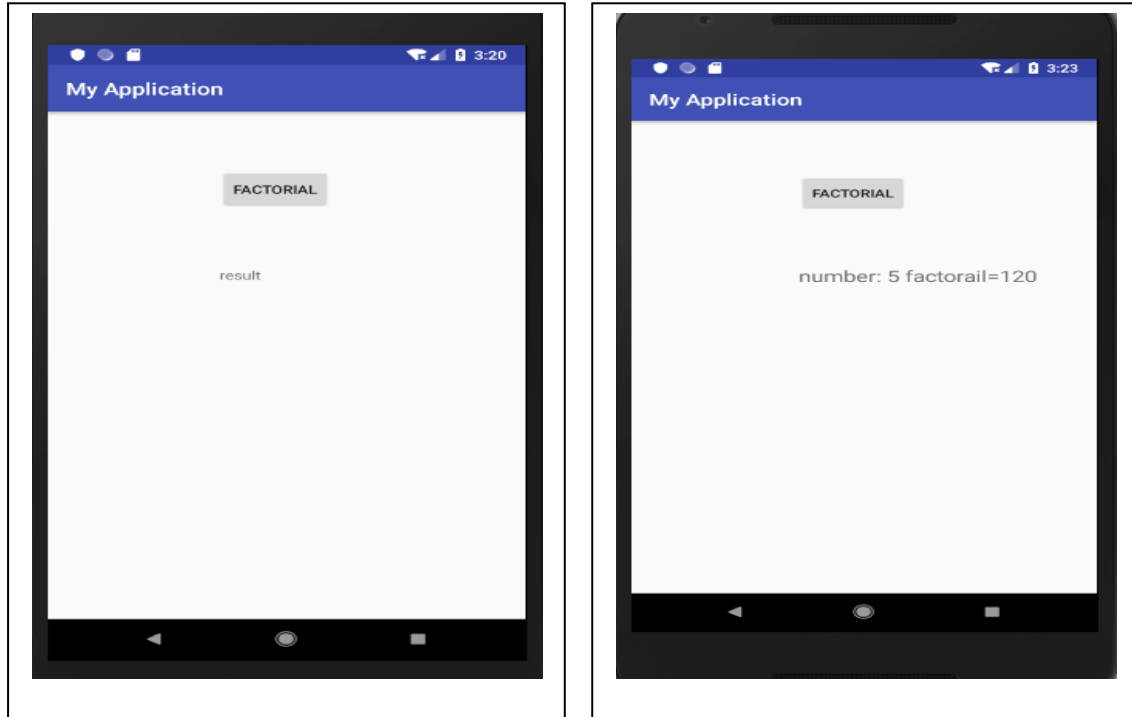# Basic Intent

XML code:

```xml
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
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">

    <Button
        android:id="@+id/butt_fac"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="148dp"
        android:layout_marginTop="68dp"
        android:text="factorial"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/textresult"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="148dp"
        android:layout_marginTop="68dp"
        android:text="result"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/butt_fac" />
</android.support.constraint.ConstraintLayout>
```

Java code:

```java
package com.example.itech_mgr.myapplication;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

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

        btn=(Button)findViewById(R.id.butt_fac);
        result=(TextView)findViewById(R.id.textresult);


        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                int factorial=1;
                int num=5;
                for(int i = 1; i<=num; i++) {
                    factorial = i * factorial;
                }
                result.setTextSize(20);
                result.setText("number: "+num +" factorail="+ factorial);
            }
        });

    }
}
```