

## Practical Related Question

### 1. List different methods used in Intent

Methods	Description
Context.startActivity()	This is to launch a new activity or get an existing activity to be action.
Context.startService()	This is to start a new service or deliver instructions for an existence service.
Context.sendBroadcast()	This is to deliver the message to broadcast receivers.

### 2. Write an intent to display the phone dialer with the given number filled in.

```
Intent intent = new Intent(Intent.ACTION_DIAL);  
intent.setData(Uri.parse("tel:0123456789"));  
startActivity(intent);
```

## Exercise

Xml:

MainActivity:

```
<?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"
    tools:context=".MainActivity"
    android:paddingTop="10dp">
    >

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:padding="10dp">

        <EditText
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/website_text"
            android:minWidth="200dp"
            android:layout_marginRight="10dp"
            android:hint="Enter Website"
            />

        <Button
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Navigate"
            android:id="@+id/nav_button"
            />

    </LinearLayout>

    <Button
        android:id="@+id/open_dialer"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Open Dialer"

        />

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:padding="10dp">

        <EditText
```

```

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/fact_no"
        android:minWidth="200dp"
        android:layout_marginRight="10dp"
        android:hint="Enter Number"
    />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Factorial"
        android:id="@+id/factorial"
    />

</LinearLayout>

</LinearLayout>

```

## Activity2:

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.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=".Activity2">

    <TextView
        android:id="@+id/fact_result"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="175dp"
        android:layout_marginTop="352dp"
        android:layout_marginEnd="178dp"
        android:layout_marginBottom="360dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

## Java:

### MainActivity.java:

```
package com.example.practical18;
import androidx.appcompat.app.AppCompatActivity;
import android.app.SearchManager;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;

public class MainActivity extends AppCompatActivity {
    EditText website_text,fact_no;
    Button nav_button,open_dialer,factorial;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        website_text=(EditText) findViewById(R.id.website_text);
        fact_no=(EditText) findViewById(R.id.fact_no);

        nav_button=(Button) findViewById(R.id.nav_button);
        factorial=(Button) findViewById(R.id.factorial);

        open_dialer=(Button) findViewById(R.id.open_dialer);

        nav_button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String website= String.valueOf(website_text.getText());
                Intent viewSearch=new Intent(Intent.ACTION_WEB_SEARCH);
                viewSearch.putExtra(SearchManager.QUERY,website);
                startActivity(viewSearch);
            }
        });
        open_dialer.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent viewDialer=new Intent(Intent.ACTION_DIAL);
                startActivity(viewDialer);
            }
        });
        factorial.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String num= String.valueOf(fact_no.getText()+"");

                Intent fact=new Intent(MainActivity.this,Activity2.class);
                fact.putExtra("number",num);
                startActivity(fact);
            }
        });
    }
}
```

## Activity2.java

```
package com.example.practical18;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.widget.TextView;

public class Activity2 extends AppCompatActivity {
    TextView fact_result;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_2);
        fact_result=(TextView) findViewById(R.id.fact_result);
        int number = Integer.parseInt(getIntent().getStringExtra("number"));
        int i,fact=1;

        for(i=1;i<=number;i++){
            fact=fact*i;
        }
        fact_result.setText(Integer.toString(fact));
    }
}
```