

Practical 18

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);
```

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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
```

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```
        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>
```

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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);
            }
        });
    }
}
```

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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));
    }
}
```