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Program No:	14
Roll No :	1545
Title of Program :	Intent
Objective :	To learn the concept of Intents in android.

What are intents?

In Android, it is quite usual for users to witness a jump from one application to another as a part of the whole process, for example, searching for a location on the browser and witnessing a direct jump into Google Maps or receiving payment links in Messages Application (SMS) and on clicking jumping to PayPal or GPay (Google Pay). This process of taking users from one application to another is achieved by passing the Intent to the system. Intents , in general, are used for navigating among various activities within the same application, but note, is not limited to one single application, i.e., they can be utilized from moving from one application to another as well.

Types of intents:

Implicit Intent
Implicit Intent doesn't specify the component. In such a case, intent provides information on available components provided by the system that is to be invoked. For example, you may write the following code to view the webpage.

Explicit Intent
Explicit Intent specifies the component. In such a case, intent provides the external class to be invoked.

Source Code:

activity_main.xml

```xml
<RelativeLayout 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"
    >

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Explicit Intent Example"
        android:id="@+id/explicit_Intent"
        android:layout_centerHorizontal="true"
        android:layout_above="@+id/implicit_Intent"
         />

    <Button
```

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```xml
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Implicit Intent Example"
        android:id="@+id/implicit_Intent"
        android:layout_marginTop="20dp"
        android:layout_centerVertical="true"
        android:layout_centerHorizontal="true" />

</RelativeLayout>
```

MainActivity.java

```java
package com.example.intentapp;

import android.net.Uri;
import android.os.Bundle;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;
import android.content.Intent;
import android.view.View;
import android.widget.Button;
public class MainActivity extends AppCompatActivity {
    Button explicit_btn, implicit_btn;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);

        explicit_btn = (Button) findViewById(R.id.explicit_Intent);
        implicit_btn = (Button) findViewById(R.id.implicit_Intent);

        explicit_btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(getBaseContext(), MainActivity2.class);
                startActivity(intent);
            }
        });

        implicit_btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(Intent.ACTION_VIEW);
```

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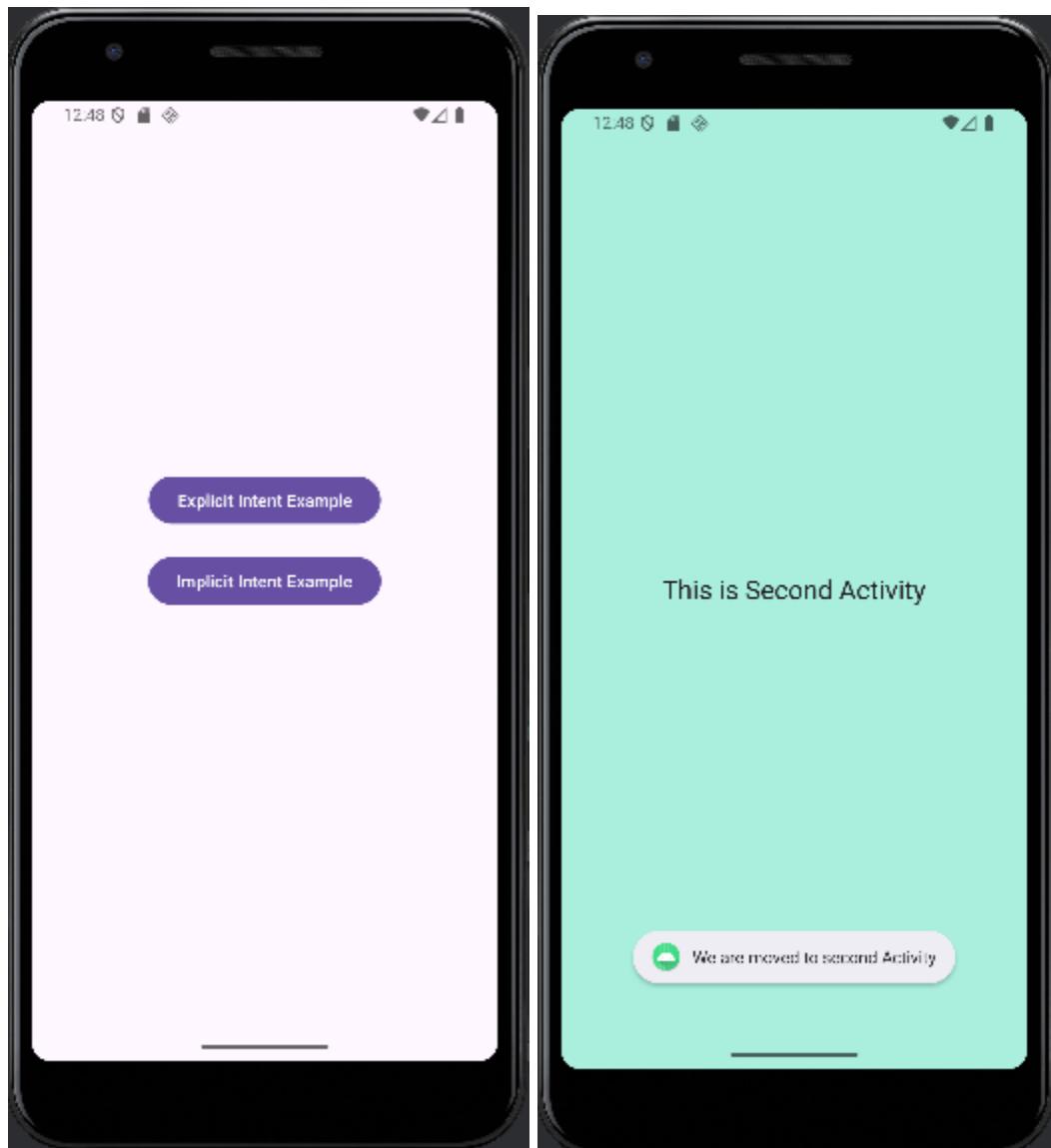MET
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```java
intent.setData(Uri.parse("https://shivam-react-portfolio.netlify.app/"));
            startActivity(intent);
        }
    });
    }
}
```

activity_main2.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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:background="#AAEEDE">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="This is Second Activity"
        android:id="@+id/textView"
        android:layout_centerVertical="true"
        android:layout_centerHorizontal="true" />
</RelativeLayout>
```

MainActivity2.java

```java
package com.example.intentapp;

import android.os.Bundle;
import android.widget.Toast;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class MainActivity2 extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main2);

        Toast.makeText(getApplicationContext(), "We are moved to second
Activity",Toast.LENGTH_LONG).show();
    }
```

}

Output:

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