Practical: 5

AIM- What is Intent? Write down types of Intent and types of Intent Action. Create an application which demonstrates **implicit Intent** for following features.

1. Make call to specific number

2. Open specific URL

3. Open Call Log

4. Open Gallery

5. Set Alarm

6. Open Camera

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Activity_main.xml :-

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


    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:text="Web URL :"
        android:textSize="15sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <EditText
        android:id="@+id/url"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="9"
        android:inputType="text"
        app:layout_constraintBaseline_toBaselineOf="@+id/textView"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent" />

    <Button
        android:id="@+id/browse"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="24dp"
        android:layout_marginEnd="4dp"
        android:text="Browse"
        app:layout_constraintBaseline_toBaselineOf="@+id/url"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/textView2"
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="44dp"
    android:text="Phone No.:"
    android:textSize="15sp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView" />

<EditText
    android:id="@+id/phone"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="9"
    android:inputType="phone"
    app:layout_constraintBaseline_toBaselineOf="@+id/textView2"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent" />

<Button
    android:id="@+id/call"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Call"
    app:layout_constraintBaseline_toBaselineOf="@+id/phone"
    app:layout_constraintEnd_toEndOf="parent" />

<TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:text="Call Log :"
    android:textSize="15sp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView2" />

<Button
    android:id="@+id/callLog"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Call Log"
    app:layout_constraintBaseline_toBaselineOf="@+id/textView3"
    app:layout_constraintEnd_toEndOf="parent" />

<TextView
    android:id="@+id/textView4"
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:text="Gallery :"
    android:textSize="15sp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView3" />

<Button
    android:id="@+id/gallery"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Gallery"
    app:layout_constraintBaseline_toBaselineOf="@+id/textView4"
    app:layout_constraintEnd_toEndOf="parent" />

<TextView
    android:id="@+id/textView5"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:text="Camera :"
    android:textSize="15sp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView4" />

<Button
    android:id="@+id/camera"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Camera"
    app:layout_constraintBaseline_toBaselineOf="@+id/textView5"
    app:layout_constraintEnd_toEndOf="parent" />

<TextView
    android:id="@+id/textView6"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:text="Alarm :"
    android:textSize="15sp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView5" />

<Button
    android:id="@+id/alarm"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
```

```
android:text="Alarm"
app:layout_constraintBaseline_toBaselineOf="@+id/textView6"
app:layout_constraintEnd_toEndOf="parent" />
```

</androidx.constraintlayout.widget.ConstraintLayout>

MainActivity.kt :-

package com.example.mad_practical_5_21012021031


```kotlin
import android.content.Intent
import android.net.Uri
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.provider.AlarmClock
import android.provider.CallLog
import android.provider.ContactsContract
import android.provider.MediaStore
import android.widget.Button
import android.widget.EditText

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        val btn : Button = findViewById(R.id.browse)
        val editBrowse : EditText = findViewById(R.id.url)
        btn.setOnClickListener {
            browser(editBrowse.text.toString())
        }

        val phn : Button = findViewById(R.id.call)
        val num : EditText = findViewById(R.id.phone)
        phn.setOnClickListener {
            call(num.text.toString())
        }

        val cal : Button = findViewById(R.id.callLog)
        cal.setOnClickListener {
            callLog()
        }
        val glr : Button = findViewById(R.id.gallery)
        glr.setOnClickListener {
        gallery()
        }
```

```kotlin
 val cam : Button = findViewById(R.id.camera)
    cam.setOnClickListener {
    camera()
    }

    val alar : Button = findViewById(R.id.alarm)
    alar.setOnClickListener {
       alarm()
    }
 }

 fun browser(url: String) {
    Intent(Intent.ACTION_VIEW, Uri.parse(url)).also { startActivity(it) }
 }

 fun call(phone: String) {
    Intent(Intent.ACTION_DIAL).setData(Uri.parse("tel:$phone")).also { startActivity(it) }
 }

 fun callLog() {
    Intent(Intent.ACTION_VIEW).setType(CallLog.Calls.CONTENT_TYPE).also { startActivity(it) }
 }

 fun gallery() {
    Intent(Intent.ACTION_VIEW).setType("image/*").also { startActivity(it) }
 }

 fun camera() {
    Intent(MediaStore.ACTION_IMAGE_CAPTURE).also { startActivity(it) }
 }

 fun alarm() {
    Intent(AlarmClock.ACTION_SHOW_ALARMS).also { startActivity(it) }
 }
}
```
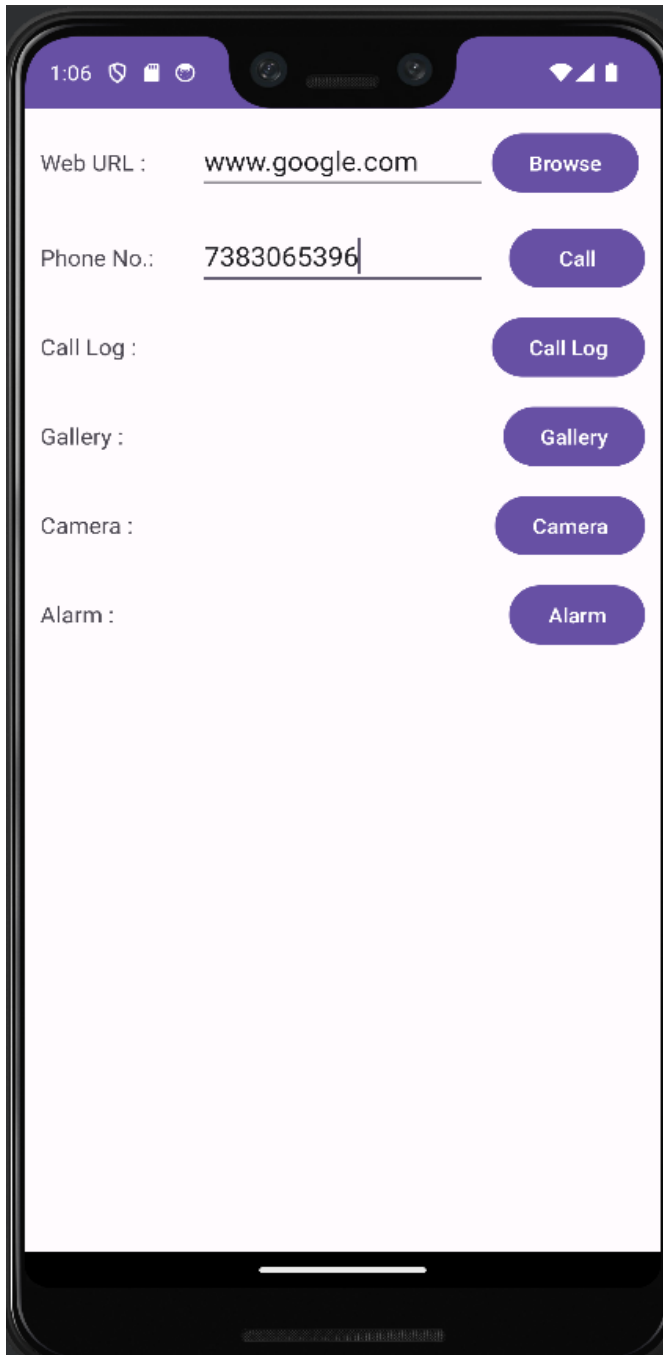
Output :-

LIGHT THEME   **DARK THEME**