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AIM-What is Intent? Write down types of Intent and types of Intent Action. Create an application which demonstrates **implicit Intent** for following features and also create different activities and demonstrate **explicit Intent**. Use parent theme Theme.Material3.Dark.NoActionBar for Dark theme and Theme.Material3.Light.NoActionBar for Light Theme

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1. Make call to specific number
2. Open specific URL
3. Pick up Contact from Existing contact list
4. Open Call Log
5. Open Gallery
6. Set Alarm
7. Open Camera

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MainActivity.kt:

```
package com.example.madpractrical4_20012011139

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 com.google.android.material.textfield.TextInputEditText

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

        var buttonBrowse=findViewById<Button>(R.id.button_browse)
        buttonBrowse.setOnClickListener{
            val url = findViewById<TextInputEditText>(R.id.input_browse).text
            var url_text = url.toString()
            Intent(Intent.ACTION_VIEW).setData(Uri.parse(url_text)).apply {
startActivity(this) }
        }

        var buttonCall = findViewById<Button>(R.id.button_call)
        buttonCall.setOnClickListener{
            var number = findViewById<TextInputEditText>(R.id.input_call).text
```

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```
        var number_text = "tel: $number"
        Intent(Intent.ACTION_DIAL).setData(Uri.parse(number_text)).apply {
startActivity(this) }
    }

    var buttonContact = findViewById<Button>(R.id.button_contact)
    buttonContact.setOnClickListener{

Intent(Intent.ACTION_VIEW).setType(ContactsContract.Contacts.CONTENT_TYPE).apply {
startActivity(this) }
    }

    var buttonCallLog = findViewById<Button>(R.id.button_calllog)
    buttonCallLog.setOnClickListener{
        Intent(Intent.ACTION_VIEW).setType(CallLog.Calls.CONTENT_TYPE).apply {
startActivity(this) }
    }

    var buttonGallery = findViewById<Button>(R.id.button_gallery)
    buttonGallery.setOnClickListener{
        Intent(Intent.ACTION_VIEW).setType("image/*").apply {
startActivity(this) }
    }
    var buttonCamera = findViewById<Button>(R.id.button_camera)
    buttonCamera.setOnClickListener{
        Intent(MediaStore.ACTION_IMAGE_CAPTURE).apply { startActivity(this) }
    }
    var buttonAlarm = findViewById<Button>(R.id.button_alarm)
    buttonAlarm.setOnClickListener{
        Intent(AlarmClock.ACTION_SHOW_ALARMS).apply { startActivity(this) }}
    }
}
```

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"
    tools:context=".MainActivity">

    <com.google.android.material.textfield.TextInputLayout
        android:id="@+id/text_browse"
        android:layout_width="230sp"
        android:layout_height="wrap_content"
        style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
        app:boxStrokeColor="@color/black"
        android:layout_marginTop="50sp"
        app:layout_constraintEnd_toStartOf="@+id/button_browse">
```

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```
app:layout_constraintStart_toEndOf="@id/button_browse"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent">
<com.google.android.material.textfield.TextInputEditText
    android:id="@+id/input_browse"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:inputType="textUri"
    android:drawableStart="@drawable/ic_baseline_web_24"
    android:hint="    Web URL"
    >
</com.google.android.material.textfield.TextInputEditText>
</com.google.android.material.textfield.TextInputLayout>

<com.google.android.material.textfield.TextInputLayout
    android:id="@+id/text_call"
    android:layout_width="230sp"
    android:layout_height="wrap_content"
    android:layout_marginTop="10sp"
    style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
    app:boxStrokeColor="@color/black"
    app:layout_constraintEnd_toStartOf="@+id/button_call"
    app:layout_constraintStart_toEndOf="@+id/button_call"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/text_browse">

    <com.google.android.material.textfield.TextInputEditText
        android:id="@+id/input_call"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:drawableStart="@drawable/ic_baseline_call_24"
        android:hint="    Call Number"
        android:inputType="number"
        >
    </com.google.android.material.textfield.TextInputEditText>
</com.google.android.material.textfield.TextInputLayout>

<com.google.android.material.textfield.TextInputLayout
    android:id="@+id/text_contact"
    android:layout_width="230sp"
    android:layout_height="wrap_content"
    android:layout_marginTop="10sp"
    style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
    app:boxStrokeColor="@color/black"
    app:layout_constraintEnd_toStartOf="@+id/button_contact"
    app:layout_constraintStart_toEndOf="@+id/button_contact"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/text_call">
    <com.google.android.material.textfield.TextInputEditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:drawableStart="@drawable/ic_baseline_contact_phone_24"
        android:hint="    Contact List"
        >
    </com.google.android.material.textfield.TextInputEditText>
</com.google.android.material.textfield.TextInputLayout>

<com.google.android.material.textfield.TextInputLayout
```

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```
        android:id="@+id/text_calllog"
        android:layout_width="230sp"
        android:layout_height="wrap_content"
        android:layout_marginTop="10sp"
        style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
        app:boxStrokeColor="@color/black"
        app:layout_constraintEnd_toStartOf="@+id/button_calllog"
        app:layout_constraintStart_toEndOf="@id/button_calllog"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/text_contact">
        <com.google.android.material.textfield.TextInputEditText
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:drawableStart="@drawable/ic_baseline_web_24"
            android:hint="    Call Log"
        >

    </com.google.android.material.textfield.TextInputEditText>
</com.google.android.material.textfield.TextInputLayout>

<com.google.android.material.textfield.TextInputLayout
    android:id="@+id/text_gallery"
    android:layout_width="230sp"
    android:layout_height="wrap_content"
    android:layout_marginTop="10sp"
    style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
    app:boxStrokeColor="@color/black"
    app:layout_constraintEnd_toStartOf="@+id/button_gallery"
    app:layout_constraintStart_toEndOf="@id/button_gallery"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/text_calllog">
    <com.google.android.material.textfield.TextInputEditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:drawableStart="@drawable/ic_baseline_image_24"
        android:hint="    Gallery"
    >

    </com.google.android.material.textfield.TextInputEditText>
</com.google.android.material.textfield.TextInputLayout>

<com.google.android.material.textfield.TextInputLayout
    android:id="@+id/text_camera"
    android:layout_width="230sp"
    android:layout_height="wrap_content"
    android:layout_marginTop="10sp"
    style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
    app:boxStrokeColor="@color/black"
    app:layout_constraintEnd_toStartOf="@+id/button_camera"
    app:layout_constraintStart_toEndOf="@id/button_camera"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/text_gallery">
    <com.google.android.material.textfield.TextInputEditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:drawableStart="@drawable/ic_baseline_camera_alt_24"
        android:hint="    Camera"
    >

    </com.google.android.material.textfield.TextInputEditText>
</com.google.android.material.textfield.TextInputLayout>
```

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```
<com.google.android.material.textfield.TextInputLayout
    android:id="@+id/text_alarm"
    android:layout_width="230sp"
    android:layout_height="wrap_content"
    android:layout_marginTop="10sp"
    style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
    app:boxStrokeColor="@color/black"
    app:layout_constraintEnd_toStartOf="@+id/button_alarm"
    app:layout_constraintStart_toEndOf="@+id/button_alarm"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/text_camera">
    <com.google.android.material.textfield.TextInputEditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:drawableStart="@drawable/ic_baseline_alarm_24"
        android:hint="    Alarm"
    >
    </com.google.android.material.textfield.TextInputEditText>
</com.google.android.material.textfield.TextInputLayout>

<Button
    android:id="@+id/button_browse"
    android:layout_width="wrap_content"
    android:layout_height="55sp"
    android:layout_marginTop="56dp"
    android:layout_marginEnd="10dp"
    android:width="110sp"
    android:text="Browse"
    app:cornerRadius="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toTopOf="parent" />

<Button
    android:id="@+id/button_call"
    android:layout_width="wrap_content"
    android:layout_height="55sp"
    android:layout_marginTop="20dp"
    android:layout_marginEnd="10dp"
    android:width="110sp"
    android:text="Call"
    app:cornerRadius="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/button_browse" />

<Button
    android:id="@+id/button_contact"
    android:layout_width="wrap_content"
    android:layout_height="55sp"
    android:layout_marginTop="20dp"
    android:layout_marginEnd="10dp"
    android:width="110sp"
    android:text="Contact"
    app:cornerRadius="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/button_call" />

<Button
```

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```
        android:id="@+id/button_calllog"
        android:layout_width="wrap_content"
        android:layout_height="55sp"
        android:layout_marginTop="16dp"
        android:layout_marginEnd="10dp"
        android:width="110sp"
        android:text="Call log"
        app:cornerRadius="20sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toBottomOf="@id/button_contact" />

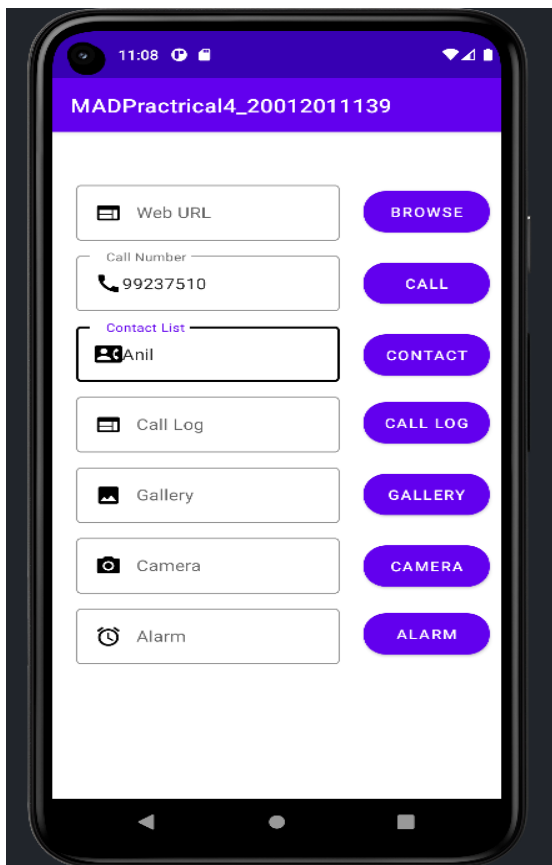
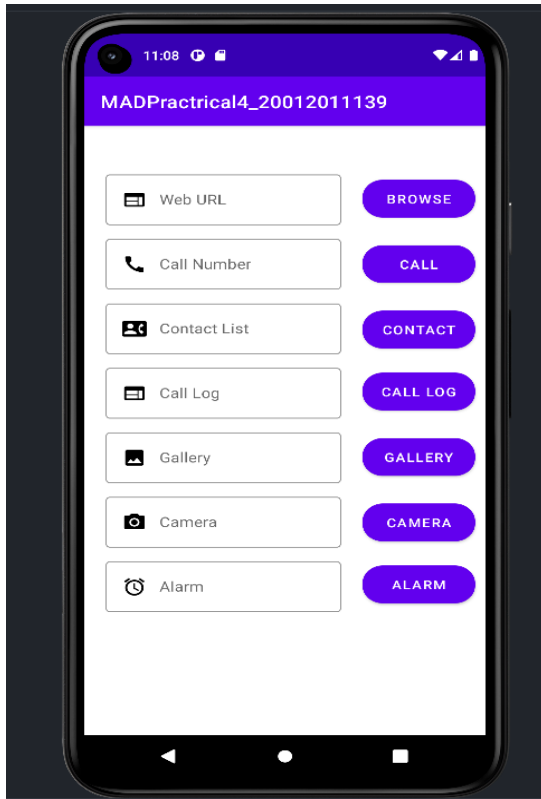
<Button
    android:id="@+id/button_gallery"
    android:layout_width="wrap_content"
    android:layout_height="55sp"
    android:layout_marginTop="20dp"
    android:layout_marginEnd="10dp"
    android:width="110sp"
    android:text="Gallery"
    app:cornerRadius="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@id/button_calllog" />

<Button
    android:id="@+id/button_camera"
    android:layout_width="wrap_content"
    android:layout_height="55sp"
    android:layout_marginTop="20dp"
    android:layout_marginEnd="10dp"
    android:width="110sp"
    android:text="@string/camera"
    app:cornerRadius="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@id/button_gallery" />

<Button
    android:id="@+id/button_alarm"
    android:layout_width="wrap_content"
    android:layout_height="55sp"
    android:layout_marginTop="16dp"
    android:layout_marginEnd="10dp"
    android:width="110sp"
    android:text="Alarm"
    app:cornerRadius="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@id/button_camera" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Output:-

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