Practical: 3

AIM:- Create an android application which demonstrates implicit & explicit Intent.

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Practical-3

Create a "Hello World" application which has a yellow layout background with red color,20sp font size and display text on the center of the screen .

Activity_main.xml:

```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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
    <TextView
        android:id="@+id/textView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="10dp"
        android:layout_marginTop="50dp"
        android:gravity="center"
        android:text="Web URL :"
        android:textSize="17sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
    <EditText
        android:id="@+id/urlinput"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginStart="3dp"
        android:layout_marginEnd="3dp"
        android:ems="10"
        android:hint="Enter URL"
        android:inputType="text"
        app:layout_constraintBaseline_toBaselineOf="@+id/textView1"
        app:layout_constraintEnd_toStartOf="@+id/urlbtn"
        app:layout_constraintStart_toEndOf="@+id/textView1" />
    <Button
        android:id="@+id/urlbtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginEnd="10dp"
        android:text="Browse"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toTopOf="@id/urlinput"
```

```
          app:layout_constraintBottom_toBottomOf="@id/urlinput"/>
<TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="10dp"
    android:layout_marginTop="40dp"
    android:gravity="center"
    android:text="Phone no. :"
    android:textSize="17sp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView1" />
<EditText
    android:id="@+id/phoneinput"
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_marginStart="3dp"
    android:layout_marginEnd="3dp"
    android:ems="10"
    android:hint="Enter phone no."
    android:inputType="text"
    app:layout_constraintEnd_toStartOf="@+id/phonebtn"
    app:layout_constraintStart_toEndOf="@+id/textView3"
    app:layout_constraintTop_toTopOf="@id/textView3"
    app:layout_constraintBottom_toBottomOf="@id/textView3"/>
<Button
    android:id="@+id/phonebtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginEnd="10dp"
    android:text="Call"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toTopOf="@id/phoneinput"
    app:layout_constraintBottom_toBottomOf="@id/phoneinput"/>
<TextView
    android:id="@+id/textView4"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="10dp"
    android:layout_marginTop="40dp"
    android:gravity="center"
    android:text="Call log :"
    android:textSize="17sp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView3" />
<TextView
    android:id="@+id/textView5"
```

```
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="10dp"
        android:layout_marginTop="40dp"
        android:gravity="center"
        android:text="Gallery :"
        android:textSize="17sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView4" />
<TextView
        android:id="@+id/textView6"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="10dp"
        android:layout_marginTop="40dp"
        android:gravity="center"
        android:text="Camera :"
        android:textSize="17sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView5" />
<TextView
        android:id="@+id/textView7"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="10dp"
        android:layout_marginTop="40dp"
        android:gravity="center"
        android:text="Alarm :"
        android:textSize="17sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView6" />
<TextView
        android:id="@+id/textView8"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="10dp"
        android:layout_marginTop="40dp"
        android:gravity="center"
        android:text="Login :"
        android:textSize="17sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView7" />
<Button
        android:id="@+id/clbtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginEnd="10dp"
```

```
        android:text="Call log"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toTopOf="@id/textView4"
        app:layout_constraintBottom_toBottomOf="@id/textView4"/>
    <Button
        android:id="@+id/glbtn"
        android:layout_width="wrap_content"
        android:layout_height="48dp"
        android:layout_marginEnd="10dp"
        android:text="Gallery"
        app:layout_constraintBottom_toBottomOf="@+id/textView5"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toTopOf="@+id/textView5" />
    <Button
        android:id="@+id/cmbtn"
        android:layout_width="wrap_content"
        android:layout_height="48dp"
        android:layout_marginEnd="10dp"
        android:text="Camera"
        app:layout_constraintBottom_toBottomOf="@+id/textView6"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toTopOf="@+id/textView6" />
    <Button
        android:id="@+id/albtn"
        android:layout_width="wrap_content"
        android:layout_height="48dp"
        android:layout_marginEnd="10dp"
        android:text="Alarm"
        app:layout_constraintBottom_toBottomOf="@+id/textView7"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toTopOf="@+id/textView7" />
    <Button
        android:id="@+id/lgbtn"
        android:layout_width="wrap_content"
        android:layout_height="48dp"
        android:layout_marginEnd="10dp"
        android:text="Login"
        app:layout_constraintBottom_toBottomOf="@+id/textView8"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toTopOf="@+id/textView8" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Login_Main.xml

```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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".LoginActivity">
    <ImageView
        android:id="@+id/imageView"
        android:layout_width="match_parent"
        android:layout_height="150dp"
        app:layout_constraintTop_toTopOf="parent"
        app:srcCompat="@drawable/guni_pink_logo" />
    <com.google.android.material.card.MaterialCardView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginHorizontal="20dp"
        app:cardElevation="20dp"
        app:cardCornerRadius="30dp"
        app:layout_constraintTop_toBottomOf="@id/imageView">
        <androidx.constraintlayout.widget.ConstraintLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:padding="40dp">
            <TextView
                android:id="@+id/email_text"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Email :"
                android:layout_marginStart="10dp"
                android:textSize="17sp"
                app:layout_constraintTop_toTopOf="parent"
                app:layout_constraintStart_toStartOf="parent"/>
            <EditText
                android:id="@+id/email_input"
                android:layout_width="0dp"
                android:layout_height="wrap_content"
                android:hint="Enter your email"
                android:layout_marginStart="10dp"
                android:layout_marginEnd="5dp"
                app:layout_constraintTop_toTopOf="@id/email_text"
                app:layout_constraintBottom_toBottomOf="@id/email_text"
                app:layout_constraintStart_toEndOf="@id/email_text"
```

```
        app:layout_constraintEnd_toEndOf="parent"
        android:inputType="textEmailAddress"/>
    <TextView
        android:id="@+id/password_text"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Password :"
        android:layout_marginStart="10dp"
        android:textSize="17sp"
        app:layout_constraintTop_toBottomOf="@id/email_text"
        app:layout_constraintStart_toStartOf="parent"
        android:layout_marginTop="30dp"/>
    <EditText
        android:id="@+id/password_input"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:hint="Enter your password"
        android:layout_marginStart="10dp"
        android:layout_marginEnd="5dp"
        app:layout_constraintTop_toTopOf="@id/password_text"
        app:layout_constraintBottom_toBottomOf="@id/password_text"
        app:layout_constraintStart_toEndOf="@id/password_text"
        app:layout_constraintEnd_toEndOf="parent"
        android:inputType="textPassword"/>
    <TextView
        android:id="@+id/forgot_password"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="10dp"
        android:layout_marginTop="20dp"
        android:text="Forgot Password?"
        android:textSize="17sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@id/password_text"/>
    <Button
        android:id="@+id/login_btn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="30dp"
        android:text="LOGIN"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@id/forgot_password" />
    </androidx.constraintlayout.widget.ConstraintLayout>
  </com.google.android.material.card.MaterialCardView>
</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.kt

package com.example.madprac_3

```kotlin
import android.content.Intent
import android.net.Uri
import android.os.Bundle
import android.provider.AlarmClock
import android.provider.MediaStore
import android.provider.Telephony.Mms.Intents
import android.widget.Button
import android.widget.EditText
import androidx.activity.enableEdgeToEdge
import androidx.appcompat.app.AppCompatActivity
import androidx.core.view.ViewCompat
import androidx.core.view.WindowInsetsCompat
class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        enableEdgeToEdge()
        setContentView(R.layout.activity_main)
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
            val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
            insets
        }
        val urlbtn = findViewById<Button>(R.id.urlbtn)
        val urlinput = findViewById<EditText>(R.id.urlinput)
        urlbtn.setOnClickListener{
            val urlIntent = Intent(Intent.ACTION_VIEW)
            urlIntent.setData(android.net.Uri.parse(urlinput.text.toString()))
            startActivity(urlIntent)
        }
        val phonebtn = findViewById<Button>(R.id.phonebtn)
        val phoneinput = findViewById<EditText>(R.id.phoneinput)
        phonebtn.setOnClickListener {
            val phoneNumber = phoneinput.text.toString()
            val phoneIntent = Intent(Intent.ACTION_DIAL).apply {
                data = Uri.parse("tel:$phoneNumber")
            }
            startActivity(phoneIntent)
        }
        val clbtn = findViewById<Button>(R.id.clbtn)
        clbtn.setOnClickListener{
            val clIntent = Intent(Intent.ACTION_VIEW)
            clIntent.setData(android.net.Uri.parse("content://call_log/calls"))
```

```
        startActivity(clIntent)
    }
    val glbtn = findViewById<Button>(R.id.glbtn)
    glbtn.setOnClickListener{
        val intent = Intent(Intent.ACTION_VIEW).apply {
            type = "image/*"
        }
        startActivity(intent)
    }
    val cmbtn = findViewById<Button>(R.id.cmbtn)
    cmbtn.setOnClickListener{
        val cmIntent = Intent(MediaStore.ACTION_IMAGE_CAPTURE)
        startActivity(cmIntent)
    }
    val albtn = findViewById<Button>(R.id.albtn)
    albtn.setOnClickListener{
        val alIntent = Intent(AlarmClock.ACTION_SHOW_ALARMS)
        startActivity(alIntent)
    }
    val login_button=findViewById<Button>(R.id.lgbtn)
    login_button.setOnClickListener{
        Intent(this, LoginActivity::class.java)
            .putExtra("email", "Kawalgohil@gmail.com")
            .putExtra("password", "230194150938ada")
            .also{
                startActivity(it)
            }
    }
  }
 }
}
```

Login.kt
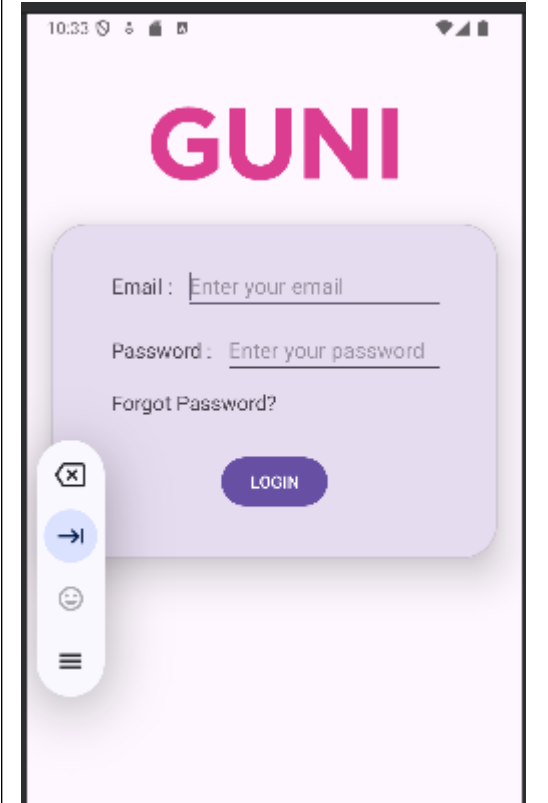
```
package com.example.madprac_3

import android.content.Intent
import android.os.Bundle
import android.util.Log
import android.widget.Button
import android.widget.EditText
import android.widget.Toast
import androidx.activity.enableEdgeToEdge
import androidx.appcompat.app.AppCompatActivity
import androidx.core.view.ViewCompat
import androidx.core.view.WindowInsetsCompat
```

```kotlin
class LoginActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        enableEdgeToEdge()
        setContentView(R.layout.login_main)
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
            val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
            insets
        }
        val email = intent.getStringExtra("email").toString()
        val password = intent.getStringExtra("password").toString()
        /*Log.i("email", email)
        Log.i("password", password)*/
        val emailip = findViewById<EditText>(R.id.email_input)
        val passwordip = findViewById<EditText>(R.id.password_input)
        val loginbtn = findViewById<Button>(R.id.login_btn)
        loginbtn.setOnClickListener {
            val emailinput = emailip.text.toString()
            val passwordinput = passwordip.text.toString()
            if (!emailinput.isBlank() && !passwordinput.isBlank()){
                Toast.makeText(this, "email: $email", Toast.LENGTH_SHORT).show()
                Toast.makeText(this, "password: $password", Toast.LENGTH_SHORT).show()
            } else {
                if (emailinput.isBlank()) {
                    Toast.makeText(this, "Enter your email", Toast.LENGTH_SHORT).show()
                } else if (passwordinput.isBlank()) {
                    Toast.makeText(this, "Enter your password", Toast.LENGTH_SHORT).show()
                }
            }
        }
    }
}
```