

Name : Deepankar Sharma
Course: BCA
University Roll No: 2092014
Student Id : 20041299
Semester: 5
Date: December 26, 2022

Practical 01: Hello World App

Objective: Create an Android Hello World App.

XML

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.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">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</android.support.constraint.ConstraintLayout>
```

JAVA

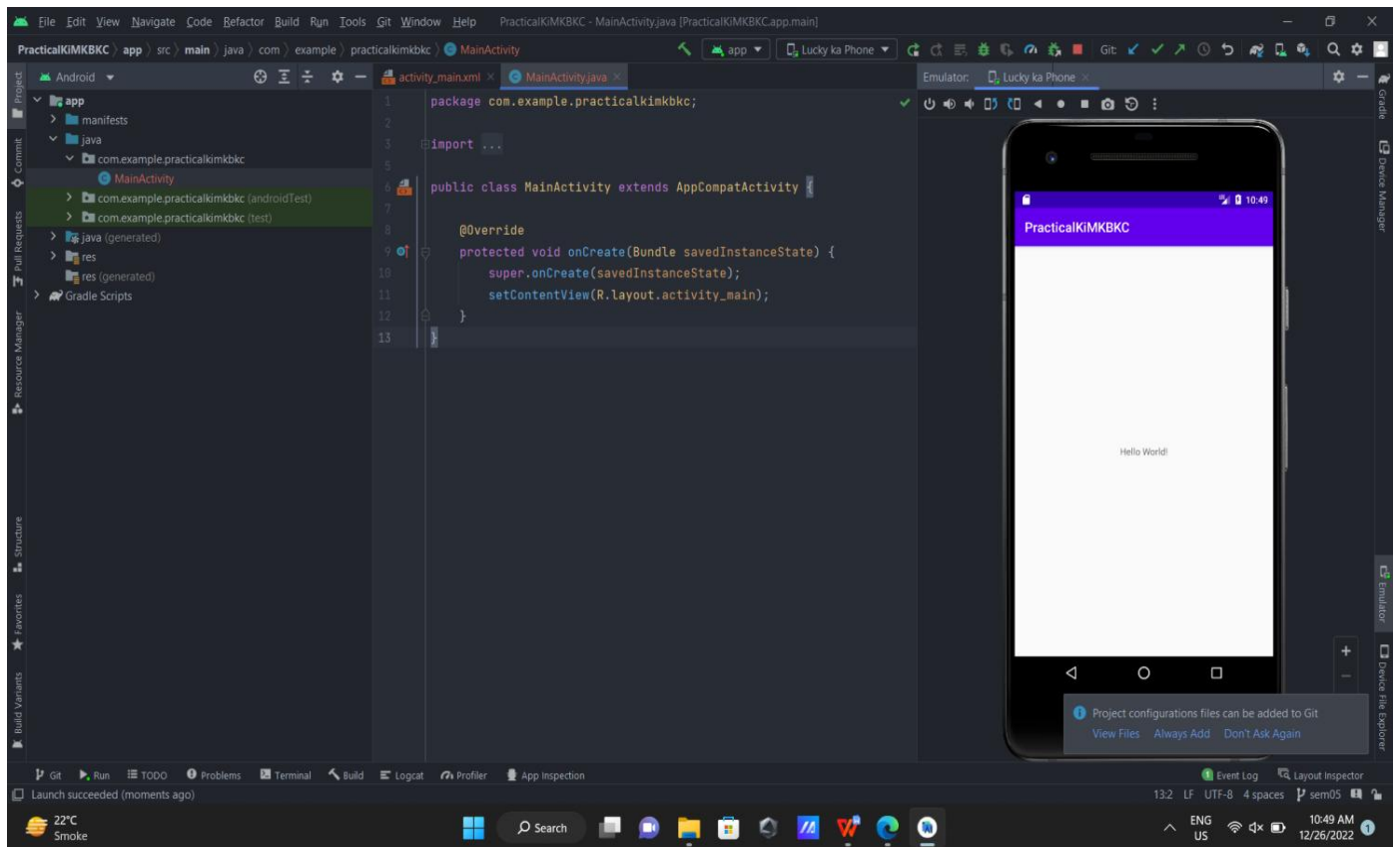
```
package com.example.practicalkimkbkc;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
```

Output:



Name : Deepankar Sharma
Course: BCA
University Roll No: 2092014
Student Id : 20041299
Semester: 5
Date: September 12, 2022

Practical 02: Unit Converter App

Objective: Create an Android app to convert kilograms into pounds.

JAVA CODE

```
package com.example.unitconverter;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    private Button b;
    private TextView tv;
    private EditText et;
```

```

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    b= findViewById(R.id.button);
    tv= findViewById(R.id.textView);
    et= findViewById(R.id.editTextTextPersonName);

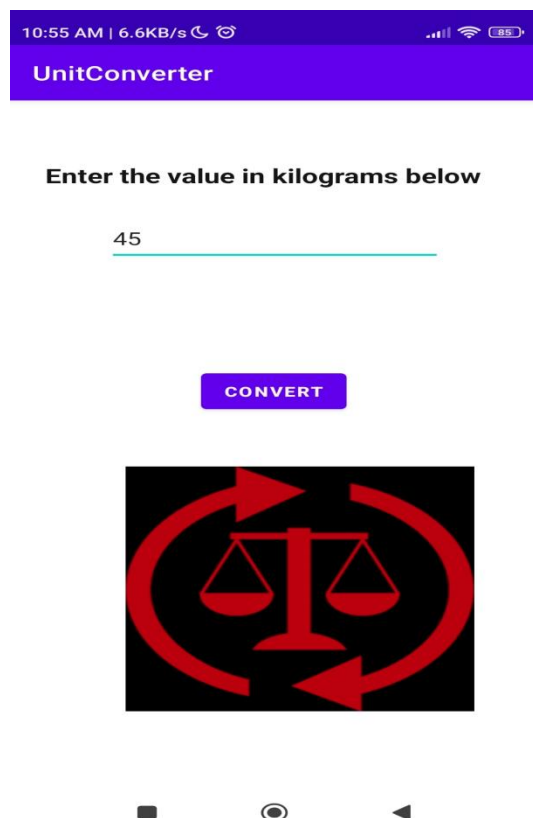
    b.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            Toast.makeText(MainActivity.this,
                Successfully !!!", Toast.LENGTH_SHORT).show();
            String s= et.getText().toString();
            int kg= Integer.parseInt(s);

            double pound= kg*2.205;
            tv.setText("The corresponding Pounds value is: "+ pound);

        }
    });
}
}

```

Output:



Name : Deepankar Sharma
Course: BCA
University Roll No: 2092014
Student Id : 20041299
Semester: 5
Date: September 12, 2022

Practical 03: Scorecard App

Objective: Create an Android app which takes input marks of five subjects and calculates the percentage as output.

JAVA CODE

```
package com.example.percentagcalculator;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    private Button b;
    private EditText e1;
    private EditText e2;
    private EditText e3;
    private EditText e4;
    private EditText e5;
    private TextView t1;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        b= findViewById(R.id.button);
        e1= findViewById(R.id.editTextNumberDecimal);
        e2= findViewById(R.id.editTextNumberDecimal2);
        e3= findViewById(R.id.editTextNumberDecimal3);
        e4= findViewById(R.id.editTextNumberDecimal4);
        e5= findViewById(R.id.editTextNumberDecimal5);
        t1= findViewById(R.id.textView7);

        b.setOnClickListener(new View.OnClickListener() {
            @Override
```

```

        public void onClick(View view) {

            Toast.makeText(MainActivity.this, "Done!",
Toast.LENGTH_SHORT).show();
            String s1= e1.getText().toString();
            String s2= e2.getText().toString();
            String s3= e3.getText().toString();
            String s4= e4.getText().toString();
            String s5= e5.getText().toString();

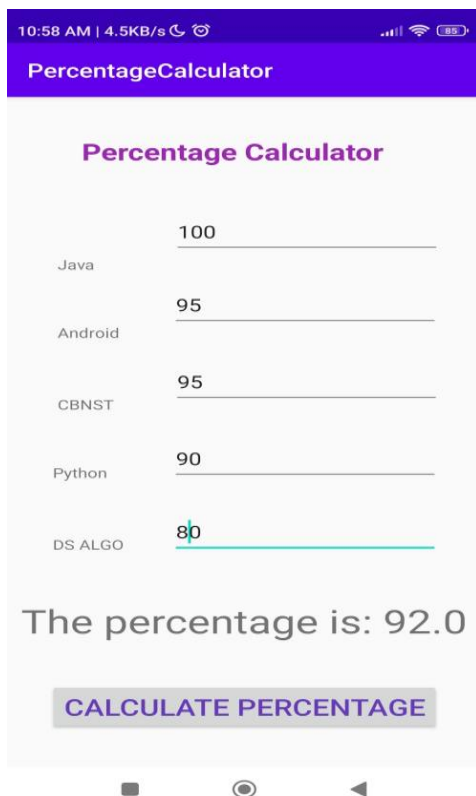

            double d1= Double.parseDouble(s1);
            double d2= Double.parseDouble(s2);
            double d3= Double.parseDouble(s3);
            double d4= Double.parseDouble(s4);
            double d5= Double.parseDouble(s5);
            double sum= d1+d2+d3+d4+d5;

            t1.setText("The percentage is: " + sum/5 );

        }
    }
}

```

Output:



Name : Deepankar Sharma
Course: BCA
University Roll No: 2092014
Student Id : 20041299
Semester: 5
Date: September 12, 2022

Practical 04: Calculator App

Objective: 4.Scientific calculator (which include java operators, >>, <<, &, ~ etc)

Java

```
package com.example.practicalkimkbkc;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.RadioButton;
import android.widget.TextView;

public class Practical04 extends AppCompatActivity {
    TextView t;
    EditText e1, e2;
    RadioButton r1, r2, r3, r4, r5, r6, r7, r8, r9;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical04);
        t= findViewById(R.id.textView4);
        e1= findViewById(R.id.editTextNumberDecimal3);
        e2= findViewById(R.id.editTextNumberDecimal4);
        r1= findViewById(R.id.radioButton);
        r2= findViewById(R.id.radioButton2);
        r3= findViewById(R.id.radioButton3);
        r4= findViewById(R.id.radioButton4);
        r5= findViewById(R.id.radioButton5);
        r6= findViewById(R.id.radioButton6);
        r7= findViewById(R.id.radioButton7);
        r8= findViewById(R.id.radioButton8);
        Button b= findViewById(R.id.button14);

        b.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
```

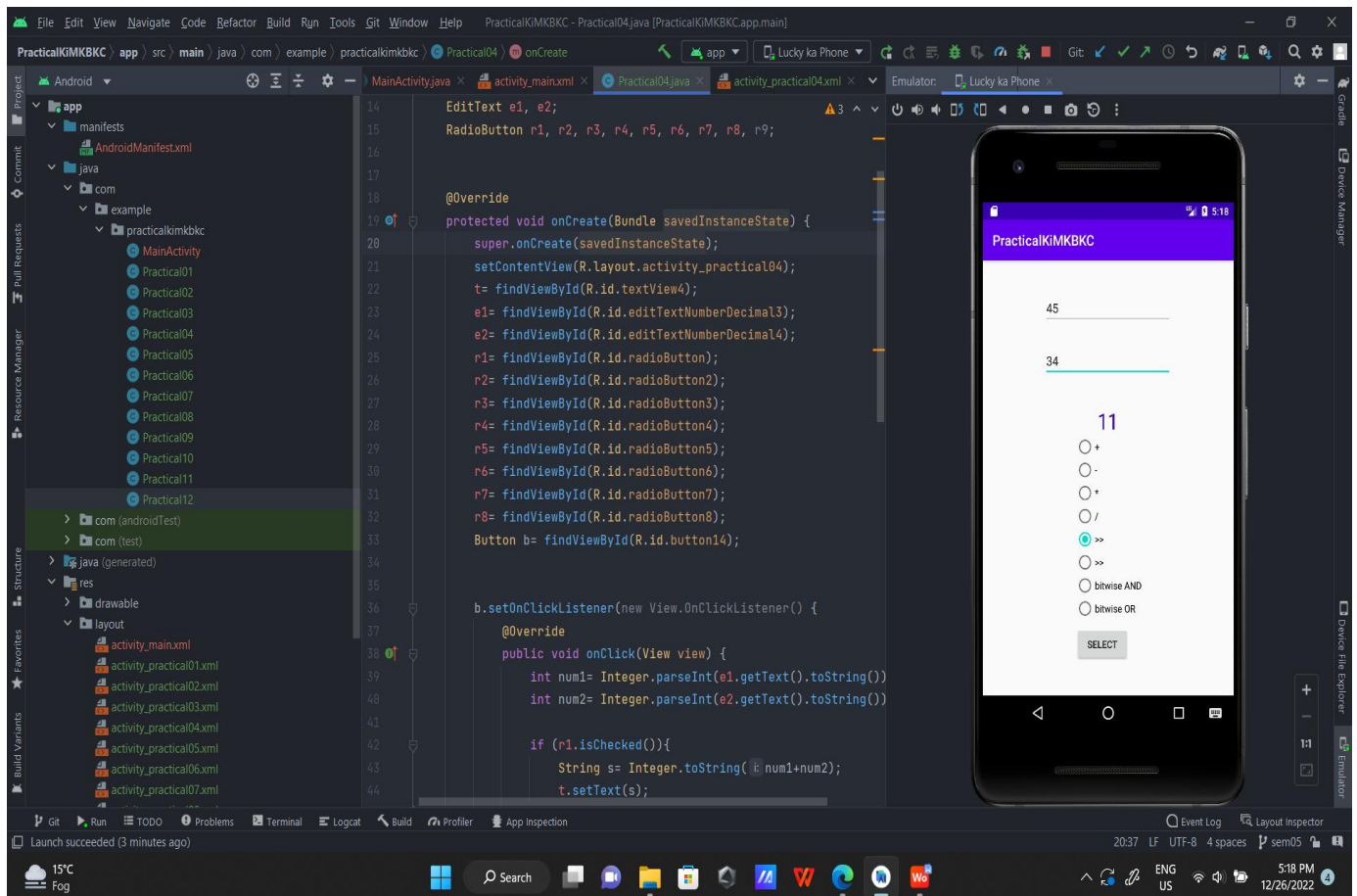
```

int num1= Integer.parseInt(e1.getText().toString());
int num2= Integer.parseInt(e2.getText().toString());

if (r1.isChecked()){
    String s= Integer.toString(num1+num2);
    t.setText(s);
}
else if (r2.isChecked()){
    String s= Integer.toString(num1-num2);
    t.setText(s);
}
else if (r3.isChecked()){
    String s= Integer.toString(num1*num2);
    t.setText(s);
}
else if (r4.isChecked()){
    String s= Integer.toString(num1/num2);
    t.setText(s);
}
else if (r5.isChecked()){
    String s= Integer.toString(num1>num2);
    t.setText(s);
}
else if (r6.isChecked()){
    String s= Integer.toString(num1<num2);
    t.setText(s);
}
else if (r7.isChecked()){
    String s= Integer.toString(num1&num2);
    t.setText(s);
}
else if (r8.isChecked()){
    String s= Integer.toString(num1|num2);
    t.setText(s);
}
}
});
}
}

```

Output



Practical 05: Change Icon

Objective: Change the app icon image.

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    package="com.example.practicalkimkbkc">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/new_icon"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.PracticalKiMKBKC"
        tools:targetApi="31">
        <activity
            android:name=".Practical12"
            android:exported="false" />
    </application>
</manifest>
```



```

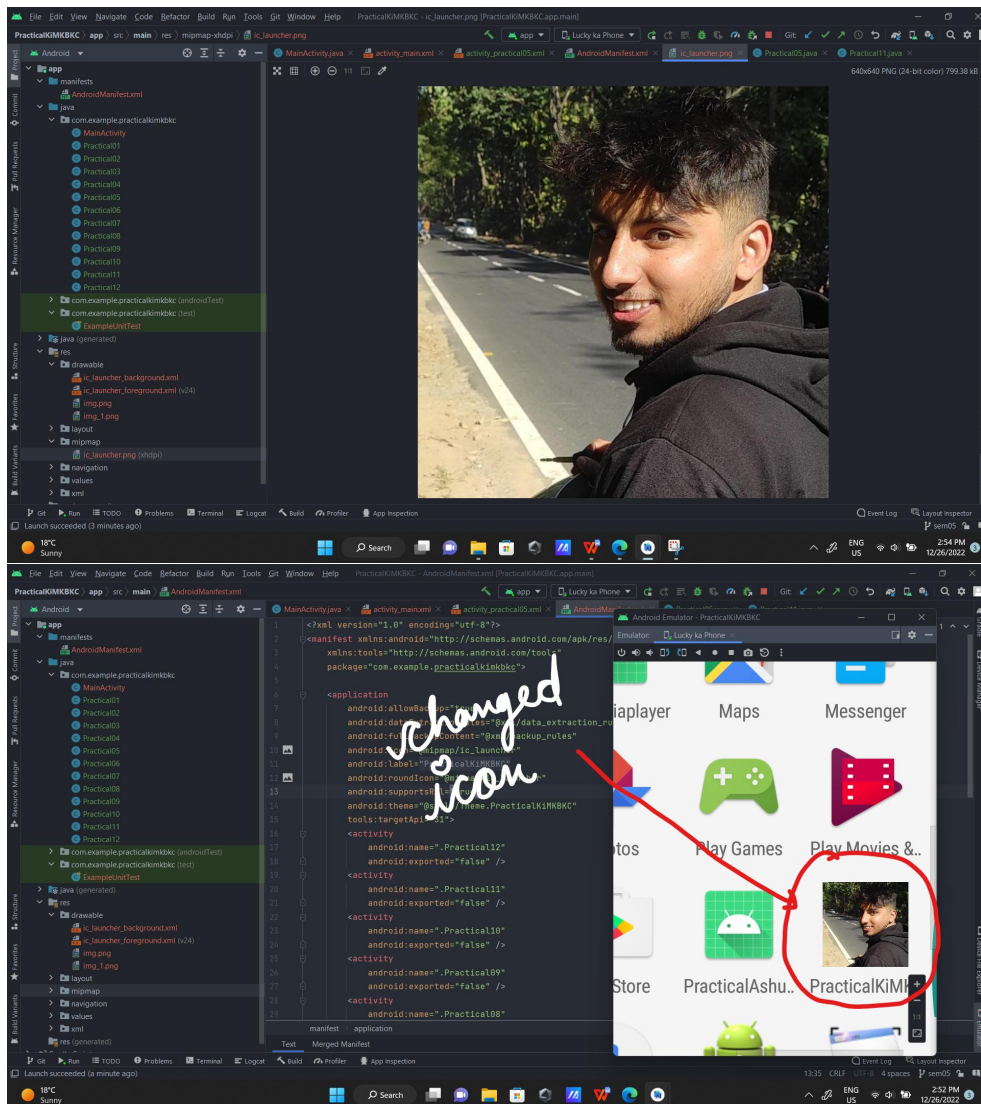
        <activity
            android:name=".Practical11"
            android:exported="false" />
        <activity
            android:name=".Practical10"
            android:exported="false" />
        <activity
            android:name=".Practical09"
            android:exported="false" />
        <activity
            android:name=".Practical08"
            android:exported="false" />
        <activity
            android:name=".Practical07"
            android:exported="false" />
        <activity
            android:name=".Practical06"
            android:exported="false" />
        <activity
            android:name=".Practical05"
            android:exported="false" />
        <activity
            android:name=".Practical04"
            android:exported="false" />
        <activity
            android:name=".Practical03"
            android:exported="false" />
        <activity
            android:name=".Practical02"
            android:exported="false" />
        <activity
            android:name=".Practical01"
            android:exported="false" />
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER"
/>
            </intent-filter>
        </activity>
    </application>

</manifest>

```

Output:



Name : Deepankar Sharma
 Course: BCA
 University Roll No: 2092014
 Student Id : 20041299
 Semester: 5
 Date: December 26, 2022

Practical 06: Demo Toast

Objective: Create an Android app to demonstrate Toast.
Java

```

package com.example.practicalkimkbbkc;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Toast;
  
```

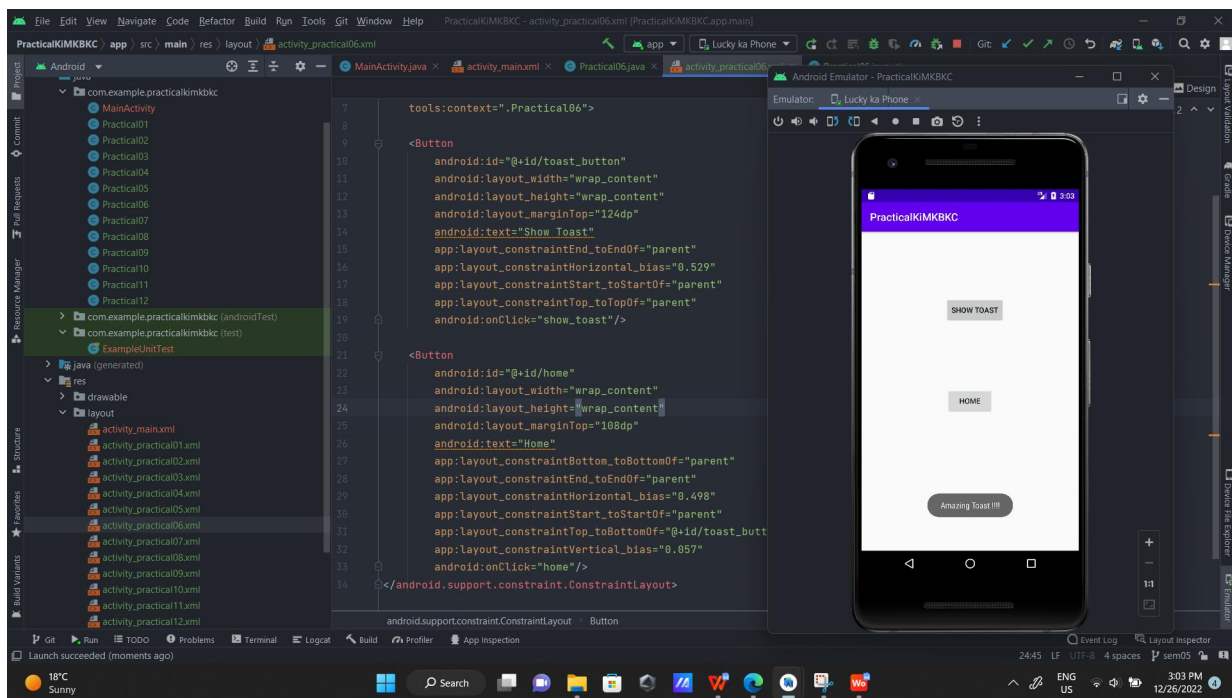
```

public class Practical06 extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical06);
    }
    public void home(View v){
        Intent i= new Intent(this, MainActivity.class);
        Toast.makeText(this, "Going Back to Home",
Toast.LENGTH_LONG).show();
        startActivity(i);
    }
    public void show_toast(View v){
        Toast.makeText(this,"Amazing Toast !!!",
Toast.LENGTH_LONG).show();
    }
}

```

Output:



Name : Deepankar Sharma
 Course: BCA
 University Roll No: 2092014
 Student Id : 20041299
 Semester: 5
 Date: December 26, 2022

Practical 07: View Demo

Objective: Create an Android app for demonstration of button, edit view, text view and setting click listeners.

JAVA:

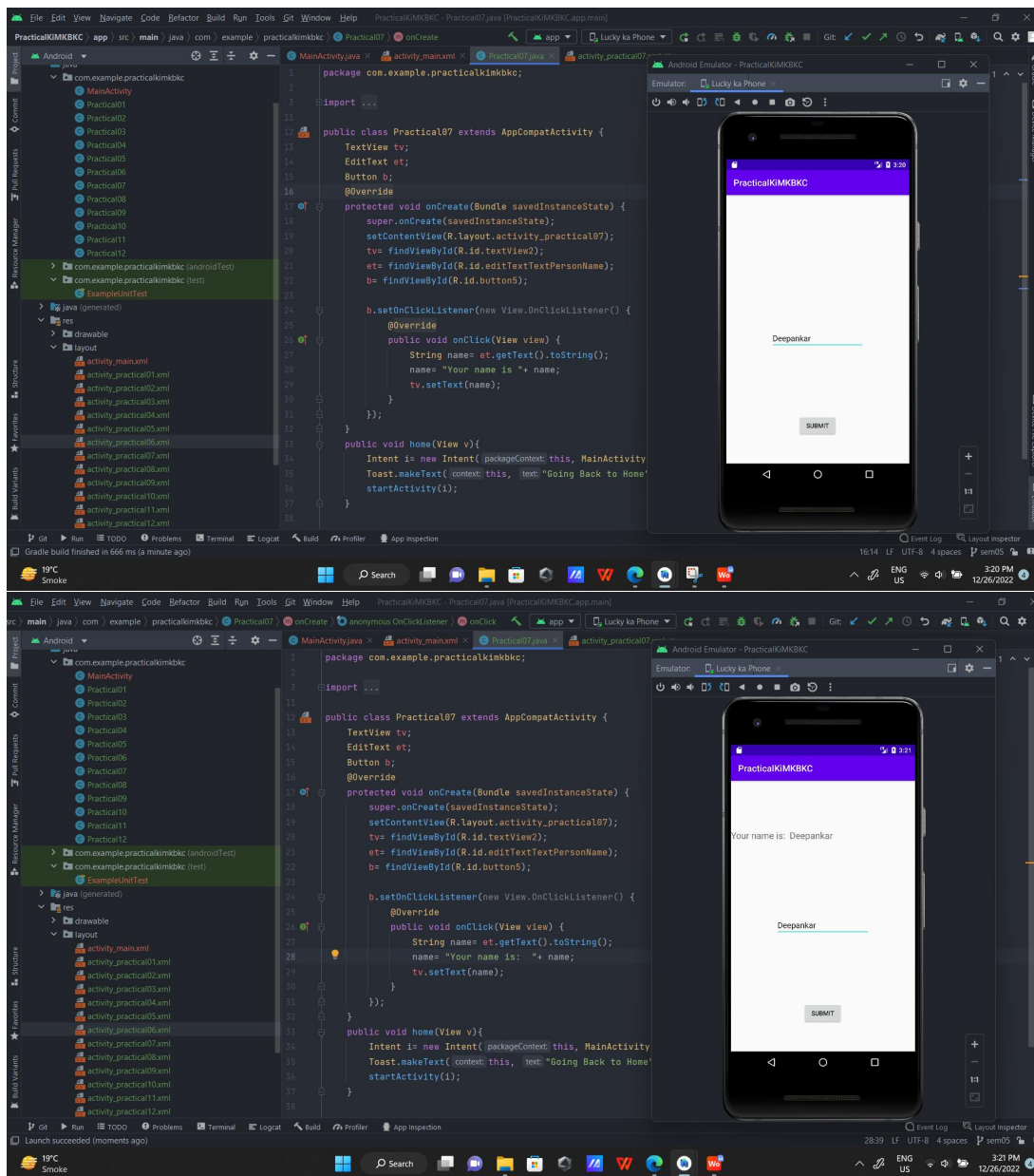
```
package com.example.practicalkimkbkc;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;

public class Practical07 extends AppCompatActivity {
    TextView tv;
    EditText et;
    Button b;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical07);
        tv= findViewById(R.id.textView2);
        et= findViewById(R.id.editTextTextPersonName);
        b= findViewById(R.id.button5);

        b.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String name= et.getText().toString();
                name= "Your name is "+ name;
                tv.setText(name);
            }
        });
    }
    public void home(View v){
        Intent i= new Intent(this, MainActivity.class);
        Toast.makeText(this, "Going Back to Home",
Toast.LENGTH_LONG).show();
        startActivity(i);
    }
}
```

Output:



Name : Deepankar Sharma
 Course: BCA
 University Roll No: 2092014
 Student Id : 20041299
 Semester: 5
 Date: December 26, 2022

Practical 08: Media Player App

Objective: Create an Android app media player.

JAVA CODE

```
package com.example.kycmediaplayer;
```

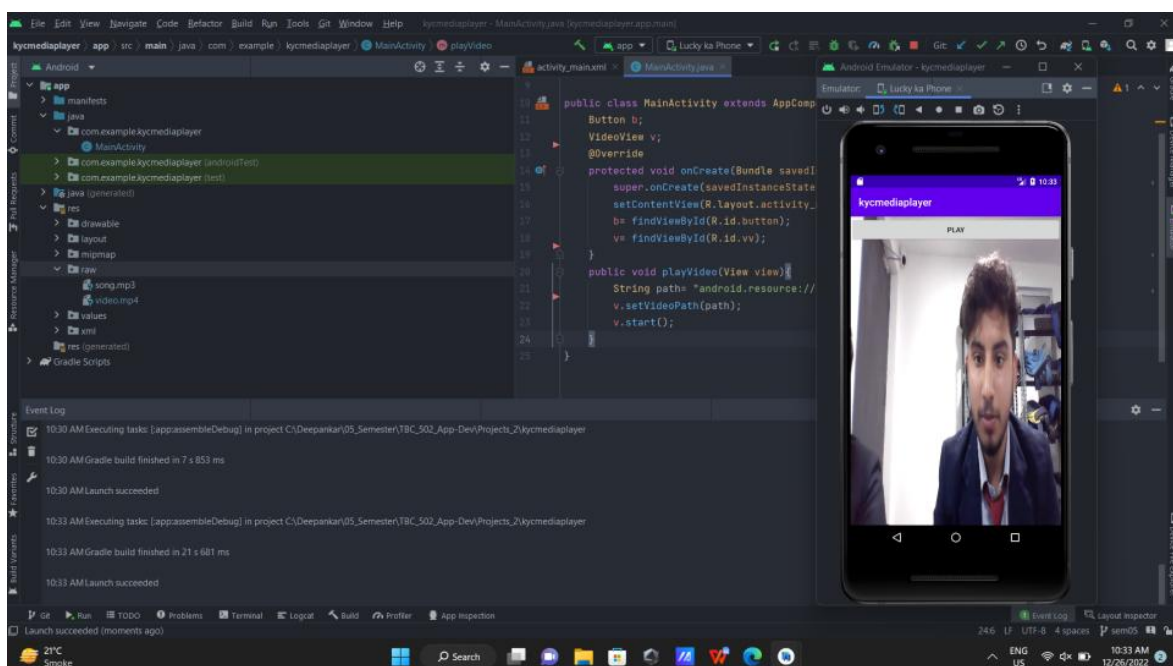
```

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.MediaController;
import android.widget.VideoView;

public class MainActivity extends AppCompatActivity {
    Button b;
    VideoView v;
    MediaController mc;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        b= findViewById(R.id.button);
        v= findViewById(R.id.vv);
        mc= new MediaController(this);
    }
    public void playVideo(View view){
        String path= "android.resource://" +
getPackageName()+ "/" + R.raw.video;
        v.setMediaController(mc);
        mc.setAnchorView(v);
        v.setVideoPath(path);
        v.start();
    }
}

```

Output:



Name : Deepankar Sharma
Course: BCA
University Roll No: 2092014
Student Id : 20041299
Semester: 5
Date: December 26, 2022

Practical 09: Setting Media Controllers App

Objective: Create an Android app media player and set the media controllers.

XML CODE

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.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">

    <Button
        android:id="@+id/button"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="@string/play"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.439"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.004"
        android:onClick="playVideo"/>

    <VideoView
        android:id="@+id/vv"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        tools:layout_editor_absoluteX="-55dp"
        tools:layout_editor_absoluteY="-16dp" />

</android.support.constraint.ConstraintLayout>
```

JAVA CODE

```
package com.example.kycmediaplayer;
```



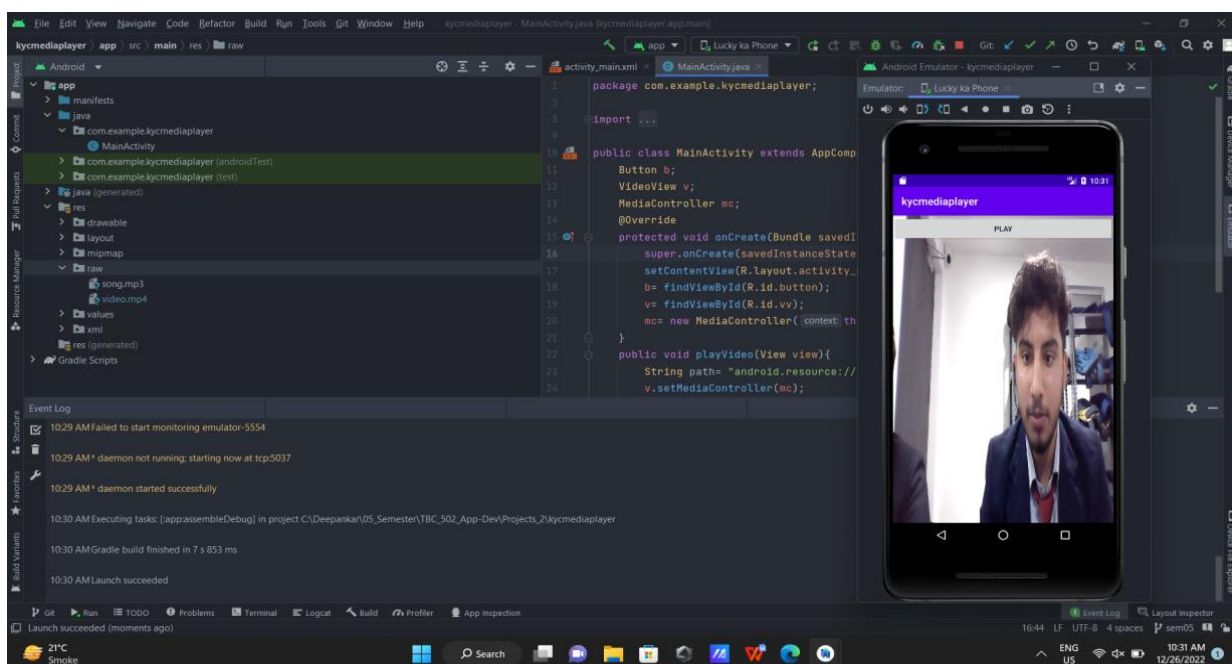
```

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.MediaController;
import android.widget.VideoView;

public class MainActivity extends AppCompatActivity {
    Button b;
    VideoView v;
    MediaController mc;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        b= findViewById(R.id.button);
        v= findViewById(R.id.vv);
        mc= new MediaController(this);
    }
    public void playVideo(View view){
        String path= "android.resource://" +
getPackageName()+ "/" + R.raw.video;
        v.setMediaController(mc);
        mc.setAnchorView(v);
        v.setVideoPath(path);
        v.start();
    }
}

```

Output:



Name : Deepankar Sharma
Course: BCA
University Roll No: 2092014
Student Id : 20041299
Semester: 5
Date: December 26, 2022

Practical 10: Intent App

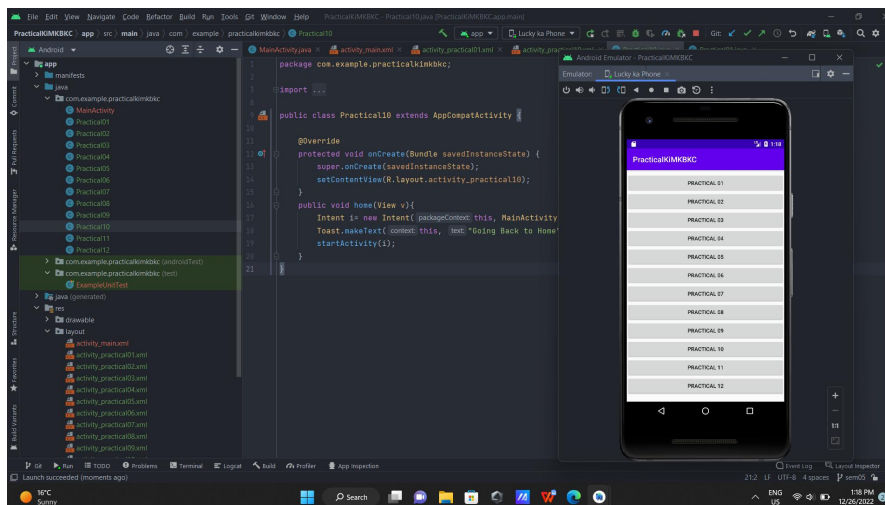
Objective: Create an Android app to demonstrate intent.

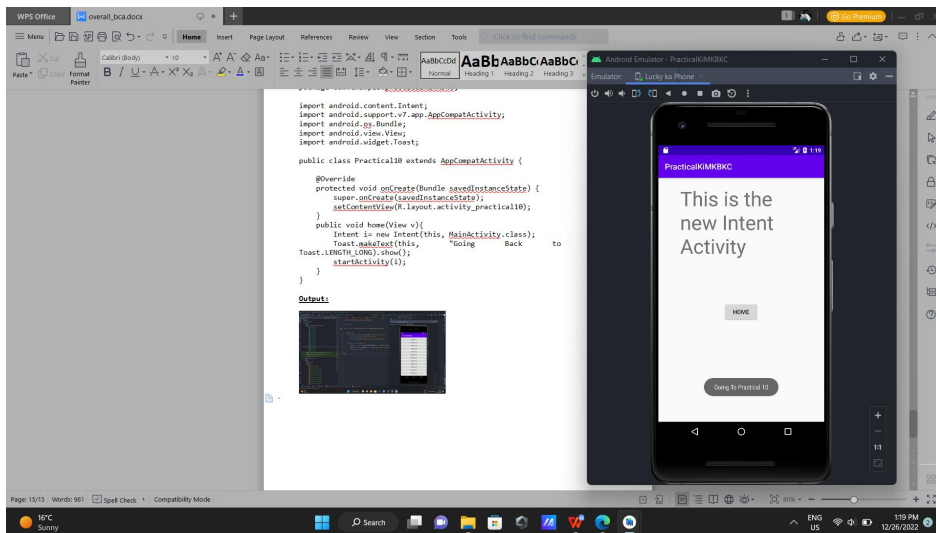
Java

```
package com.example.practicalkimkbbkc;
```

```
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Toast;
public class Practical10 extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical10);
    }
    public void home(View v){
        Intent i= new Intent(this, MainActivity.class);
        Toast.makeText(this, "Going Back to Home",
        Toast.LENGTH_LONG).show();
        startActivity(i);
    }
}
```

Output:





Practical 11: Image View App

Objective: Create an Android app to set image in image view.

Java

```
package com.example.practicalkimkbbkc;
```

```
import android.content.Intent;
```

```
import android.graphics.drawable.BitmapDrawable;
```

```
import android.graphics.drawable.Drawable;
```

```
import android.support.v7.app.AppCompatActivity;
```

```
import android.os.Bundle;
```

```
import android.view.View;
```

```
import android.widget.ImageView;
```

```
import android.widget.Toast;
```

```
public class Practical11 extends AppCompatActivity {
    private ImageView iv;
```

```
@Override
```

```
protected void onCreate(Bundle savedInstanceState) {
```

```
    super.onCreate(savedInstanceState);
```

```
    setContentView(R.layout.activity_practical11);
```

```
    iv= findViewById(R.id.imageView);
```

```
}
```

```
public void home(View v){
```

```
    Intent i= new Intent(this, MainActivity.class);
```

```
    Toast.makeText(this, "Going Back to Home",
```

```
    Toast.LENGTH_LONG).show();
```

```
    startActivity(i);
```

```
}
```

```
public void img_v(View v){
```

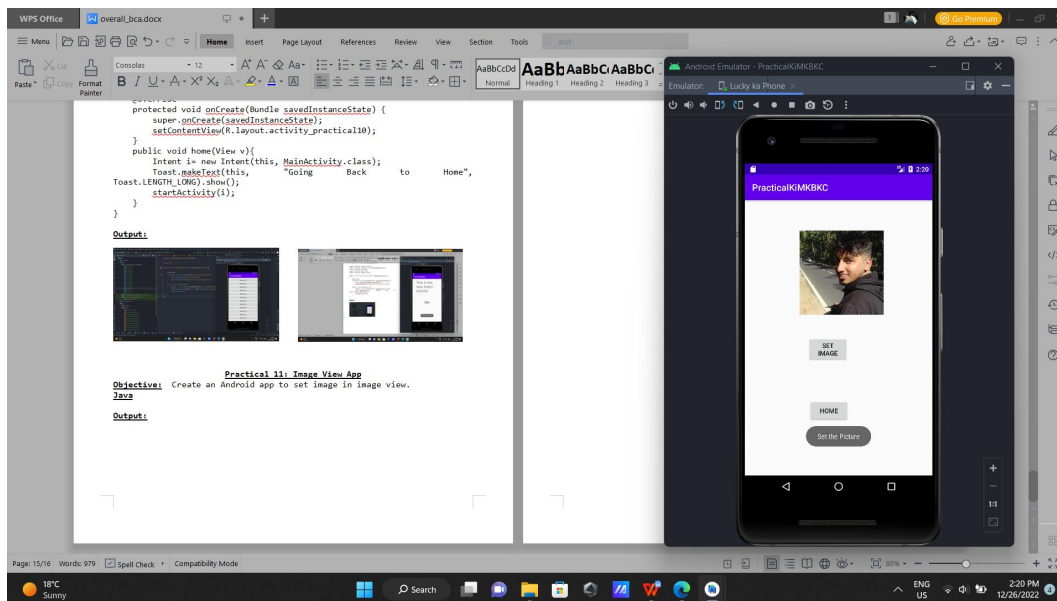
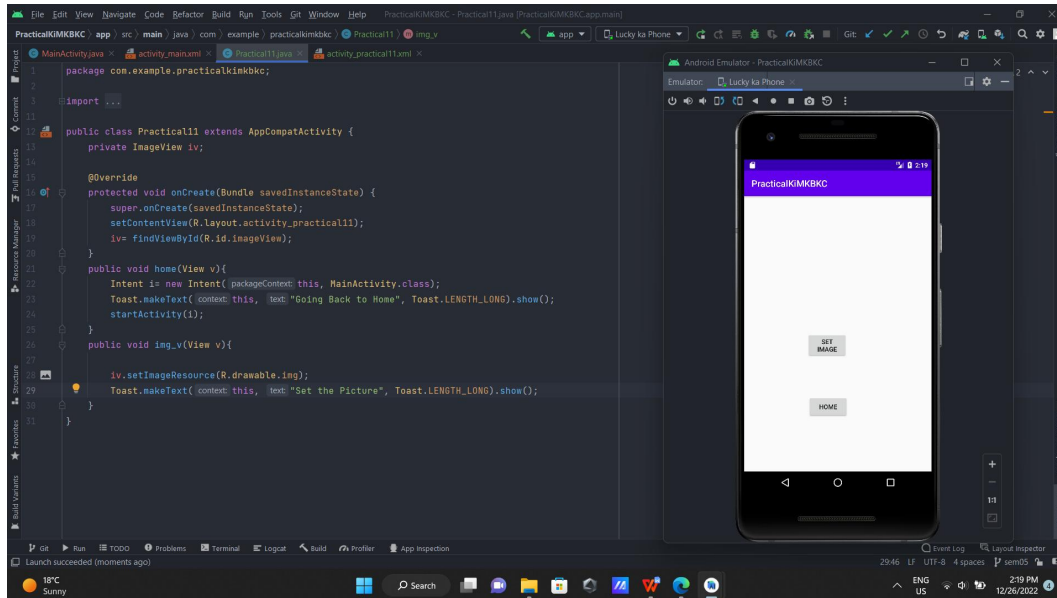
```
    iv.setImageResource(R.drawable.img);
```

```

        Toast.makeText(this, "Set the Picture", Toast.LENGTH_LONG).show();
    }
}

```

Output:



Practical 12: Simple Quiz App

Objective: Create an Android app for designing a quiz application.

Java

```
package com.example.practicalkimkbkc;
```

```
import static android.widget.Toast.*;
```

```

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.TextView;
import android.widget.Toast;

public class Practical12 extends AppCompatActivity {
    TextView t;
    RadioButton r1, r2, r3;
    RadioGroup rg;
    Button b;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_practical12);
        t= findViewById(R.id.textView5);
        r1= findViewById(R.id.radioButton9);
        r2= findViewById(R.id.radioButton10);
        r3= findViewById(R.id.radioButton11);
        rg= findViewById(R.id.radioGroup);

        r2.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                t.setText("Right");
            }
        });

        r1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                t.setText("Wrong");
            }
        });

        r3.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                t.setText("Wrong");
            }
        });
    }
}

```

Output:

