

## ASSIGNMENT-2

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Question:

Create a Dice roller

Kotlin Code:

```
package com.example.diceroller

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Button
import android.widget.ImageView
import android.widget.TextView

class MainActivity : AppCompatActivity() {

    private lateinit var resultTextView: TextView
    private lateinit var diceImage: ImageView
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        val rollButton: Button = findViewById(R.id.roll_button)
        resultTextView = findViewById(R.id.resultTextView)

        rollButton.setOnClickListener {
            rollDice()
        }
    }

    private fun rollDice() {
        val randomInt = (1..6).random()
        diceImage = findViewById(R.id.dice_image)

        val resultText = "You rolled a $randomInt"
        resultTextView.text = resultText

        val drawableResource = when (randomInt) {
            1 -> R.drawable.dice_1
            2 -> R.drawable.dice_2
            3 -> R.drawable.dice_3
            4 -> R.drawable.dice_4
            5 -> R.drawable.dice_5
            else -> R.drawable.dice_6
        }
        diceImage.setImageResource(drawableResource)
    }
}
```

```
activity_main.xml x MainActivity.kt x
1 package com.example.diceroller
2
3 import androidx.appcompat.app.AppCompatActivity
4 import android.os.Bundle
5 import android.widget.Button
6 import android.widget.ImageView
7 import android.widget.TextView
8
9 class MainActivity : AppCompatActivity() {
10
11     private lateinit var resultTextView: TextView
12     private lateinit var diceImage: ImageView
13     override fun onCreate(savedInstanceState: Bundle?) {
14         super.onCreate(savedInstanceState)
15         setContentView(R.layout.activity_main)
16
17         val rollButton: Button = findViewById(R.id.roll_button)
18         resultTextView = findViewById(R.id.resultTextView)
19
20         rollButton.setOnClickListener { it: View!
21             rollDice()
22         }
23     }
24
25     private fun rollDice() {
26         val randomInt = (1 ≤ .. ≤ 6).random()
27         diceImage = findViewById(R.id.dice_image)
28
29         val resultText = "You rolled a $randomInt"
30         resultTextView.text = resultText
31
32         val drawableResource = when (randomInt) {
33             1 -> R.drawable.dice_1
34             2 -> R.drawable.dice_2
35             3 -> R.drawable.dice_3
36             4 -> R.drawable.dice_4
37             5 -> R.drawable.dice_5
38             else -> R.drawable.dice_6
39         }
40         diceImage.setImageResource(drawableResource)
41     }
42 }
```

## Xml Code:

```
<?xml version="1.0" encoding="utf-8"?>

<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical"
    android:layout_gravity="center_vertical"
    tools:context=".MainActivity">

    <ImageView
        android:id="@+id/dice_image"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        app:srcCompat="@drawable/empty_dice"
        tools:src="@drawable/dice_1" />

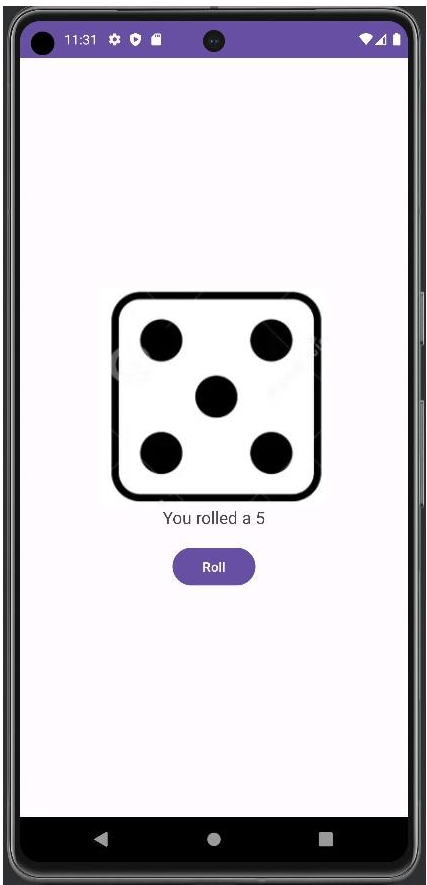
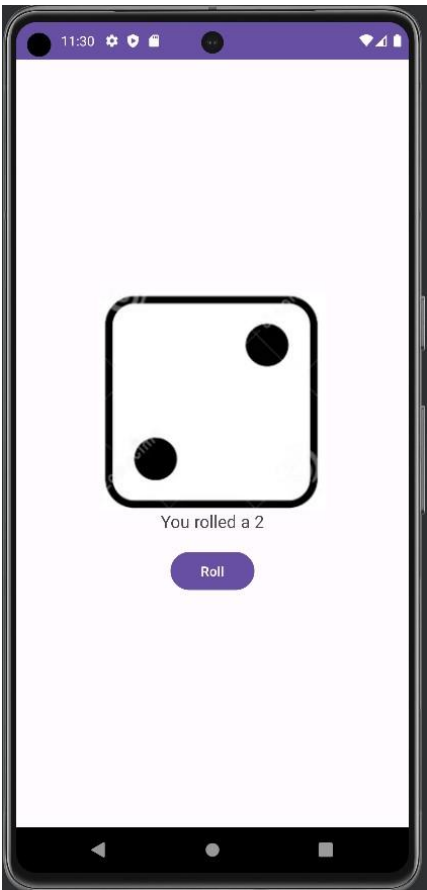
    <TextView
        android:id="@+id/resultTextView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="16dp"
        android:layout_gravity="center"
        android:text="@string/result_will_be_shown_here"
        android:textSize="18sp" />

    <Button
        android:id="@+id/roll_button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:text="@string/roll_label" />

</LinearLayout>
```

```
activity_main.xml x MainActivity.kt x
1 <?xml version="1.0" encoding="utf-8"?>
2
3 <LinearLayout
4     xmlns:android="http://schemas.android.com/apk/res/android"
5     xmlns:tools="http://schemas.android.com/tools"
6     xmlns:app="http://schemas.android.com/apk/res-auto"
7     android:layout_width="match_parent"
8     android:layout_height="wrap_content"
9     android:orientation="vertical"
10    android:layout_gravity="center_vertical"
11    tools:context=".MainActivity">
12
13    <ImageView
14        android:id="@+id/dice_image"
15        android:layout_width="wrap_content"
16        android:layout_height="wrap_content"
17        android:layout_gravity="center_horizontal"
18        app:srcCompat="@drawable/empty_dice"
19        tools:src="@drawable/dice_1" />
20
21    <TextView
22        android:id="@+id/resultTextView"
23        android:layout_width="wrap_content"
24        android:layout_height="wrap_content"
25        android:layout_marginBottom="16dp"
26        android:layout_gravity="center"
27        android:text="@string/result_will_be_shown_here"
28        android:textSize="18sp" />
29
30    <Button
31        android:id="@+id/roll_button"
32        android:layout_width="wrap_content"
33        android:layout_height="wrap_content"
34        android:layout_gravity="center_horizontal"
35        android:text="@string/roll_label" />
36
37 </LinearLayout>
```

Output:



**DRIVE LINK:**

[https://drive.google.com/drive/folders/1t-sKwmhHGdodcTrEPVOX1gPNDVXDxoD9?usp=drive\\_link](https://drive.google.com/drive/folders/1t-sKwmhHGdodcTrEPVOX1gPNDVXDxoD9?usp=drive_link)