Mobile Application Development Assignment-2

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1. Design a dice roller app to display numbers as well as the dice image of that random number.

   Activity_main.Xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/darkblack">

    <TextView
        android:id="@+id/tv"
        android:layout_width="290dp"
        android:layout_height="81dp"
        android:layout_gravity="center"
        android:layout_margin="60dp"
        android:textAlignment="center"
        android:textSize="40dp"
        android:text="Dice Roller"
        android:textStyle="bold"
        android:textColor="@color/white"/>
    <ImageView
        android:id="@+id/diceImage"
        android:layout_width="250dp"
        android:layout_height="250dp"
        android:layout_gravity="center_horizontal"
        android:layout_marginBottom="60dp"
        android:layout_marginTop="15dp"
        android:src="@drawable/dice1"
        />
    <Button
        android:id="@+id/btn"
        android:layout_width="140dp"
        android:layout_height="80dp"
        android:text="Roll"
        android:textColor="@color/white"
        android:textStyle="bold"
        android:textSize="25dp"
        android:backgroundTint="@color/orangishskin"
        android:layout_gravity="center_horizontal"
        />
</LinearLayout>
```

Kotlin:

```kotlin
package com.example.diceroller

import android.os.Bundle
import android.widget.Button
import android.widget.ImageView
import android.widget.Toast
import androidx.activity.ComponentActivity

class MainActivity : ComponentActivity() {
    lateinit var diceImage: ImageView
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        val rollbutton:Button =findViewById(R.id.btn)
        rollbutton.setOnClickListener {
            rolldice()
        }
        diceImage=findViewById(R.id.diceImage)
        }

    private fun rolldice(){
        val random = java.util.Random()
        val randomInt=random.nextInt(6)+1
        val drawableFile=when(randomInt){
            1-> R.drawable.dice1
            2-> R.drawable.dice2
            3-> R.drawable.dice3
            4-> R.drawable.dice4
            5-> R.drawable.dice5
            else -> {R.drawable.dice6}
        }
        diceImage.setImageResource(drawableFile)
        val toast = Toast.makeText(this, "$randomInt is selected", Toast.LENGTH_SHORT)
        toast.show()
    }
}
```

Colors.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <color name="black">#FF000000</color>
    <color name="white">#FFFFFFFF</color>
    <color name="orangishskin">#FFFF9B82</color>
    <color name="darkblue">#FF27005D</color>
    <color name="darkblack">#FF352F44</color>
</resources>
```

Output: