Assignment

Xml File

```
<?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">
  < Image View
    android:id="@+id/imageView"
    android:layout_width="414dp"
    android:layout height="730dp"
    app:srcCompat="@drawable/bb"
    tools:layout_editor absoluteX="0dp"
    tools:layout editor absoluteY="-1dp" />
  <CheckBox
    android:id="@+id/CDecimal"
    android:layout width="120dp"
    android:layout height="64dp"
    android:buttonTint="@color/vour color"
    android:text="Decimal"
    app:layout constraintBottom toBottomOf="parent"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintHorizontal bias="0.879"
    app:layout constraintStart toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout constraintVertical bias="0.256" />
  <CheckBox
    android:id="@+id/CBinary"
    android:layout width="120dp"
    android:layout height="64dp"
    android:buttonTint="@color/your color"
    android:text="Binary"
    app:layout constraintBottom toBottomOf="parent"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintHorizontal bias="0.879"
    app:layout constraintStart toStartOf="parent"
```

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app:layout_constraintTop_toTopOf="parent"
  app:layout_constraintVertical bias="0.352" />
<CheckBox
  android:id="@+id/CHexa"
  android:layout width="120dp"
  android:layout height="64dp"
  android:buttonTint="@color/your_color"
  android:text="Hexa"
  app:layout constraintBottom toBottomOf="parent"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout constraintHorizontal bias="0.879"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toTopOf="parent"
  app:layout constraintVertical bias="0.544" />
<CheckBox
  android:id="@+id/COctal"
  android:layout width="120dp"
  android:layout height="64dp"
  android:buttonTint="@color/your color"
  android:text="Octal"
  app:layout constraintBottom toBottomOf="parent"
  app:layout constraintEnd toEndOf="parent"
  app:layout_constraintHorizontal_bias="0.879"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toTopOf="parent"
  app:layout constraintVertical bias="0.448" />
<TextView
  android:id="@+id/textView"
  android:layout_width="166dp"
  android:layout height="27dp"
  android:text="Select Number Type:"
  android:textAlignment="center"
  android:textSize="16sp"
  android:textStyle="bold"
  app:layout constraintBottom toBottomOf="parent"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintHorizontal bias="0.126"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toTopOf="parent"
  app:layout constraintVertical bias="0.166" />
```

```
<TextView
  android:id="@+id/textView6"
  android:layout width="131dp"
  android:layout height="23dp"
  android:text="Convert To:"
  android:textAlignment="center"
  android:textSize="16sp"
  android:textStyle="bold"
  app:layout constraintBottom toBottomOf="parent"
  app:layout constraintEnd toEndOf="parent"
  app:layout constraintHorizontal bias="0.875"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toTopOf="parent"
  app:layout constraintVertical bias="0.165" />
< Radio Group
  android:id="@+id/rg"
  android:layout width="120dp"
  android:layout_height="255dp"
  android:orientation="vertical"
  app:layout constraintBottom toBottomOf="parent"
  app:layout constraintEnd toEndOf="parent"
  app:layout constraintHorizontal bias="0.137"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toTopOf="parent"
  app:layout constraintVertical bias="0.359">
  < Radio Button
    android:id="@+id/RDecimal"
    android:layout width="120dp"
    android:layout_height="64dp"
    android:buttonTint="@color/your color"
    android:text="Decimal"
    android:checked="true"/>
  < Radio Button
    android:id="@+id/RBinary"
    android:layout width="120dp"
    android:layout height="64dp"
    android:buttonTint="@color/your color"
    android:text="Binary" />
```

```
< Radio Button
    android:id="@+id/ROctal"
    android:layout width="120dp"
    android:layout height="64dp"
    android:buttonTint="@color/your color"
    android:text="Octal" />
 < Radio Button
    android:id="@+id/RHexa"
    android:layout width="120dp"
    android:layout height="64dp"
    android:buttonTint="@color/your color"
    android:text="Hexa" />
</RadioGroup>
< Image Button
  android:id="@+id/Submit"
 android:layout width="wrap content"
  android:layout height="wrap content"
  android:backgroundTint="#00FFFFFF"
  app:layout constraintBottom toBottomOf="parent"
  app:layout constraintEnd toEndOf="parent"
  app:layout_constraintHorizontal_bias="0.498"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toTopOf="parent"
  app:layout constraintVertical bias="0.946"
  app:srcCompat="@drawable/equal" />
<EditText
  android:id="@+id/Number"
  android:layout width="311dp"
  android:layout height="50dp"
  android:ems="10"
  android:hint="Enter The Number"
  android:inputType="textPersonName"
  android:textAlignment="center"
  android:textColor="#000000"
  android:textColorHighlight="#000000"
  android:textColorLink="#FCECEF"
  android:textStvle="bold"
  app:layout_constraintBottom_toBottomOf="parent"
  app:layout constraintEnd toEndOf="parent"
```

```
app:layout_constraintStart_toStartOf="parent"
    app:layout constraintTop toTopOf="parent"
    app:layout constraintVertical bias="0.696" />
</androidx.constraintlayout.widget.ConstraintLayout>
MainActivity.java
package com.example.number conversion;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.*;
public class MainActivity extends AppCompatActivity {
  RadioGroup rg;
  ImageButton Submit;
  EditText Number:
  CheckBox CDecimal, COctal, CHexa, CBinary;
  RadioButton inType:
      @Override
      protected void onCreate(Bundle savedInstanceState) {
         super.onCreate(savedInstanceState);
         setContentView(R.layout.activity_main);
         rg = findViewByld(R.id.rg);
         CDecimal = findViewByld(R.id.CDecimal);
         CBinary = findViewById(R.id.CBinary);
         CHexa = findViewById(R.id.CHexa);
         COctal = findViewByld(R.id.COctal);
         Submit = findViewById(R.id.Submit);
         Number = findViewById(R.id.Number);
         Submit.setOnClickListener(new View.OnClickListener() {
           @Override
           public void onClick(View view) {
```

```
inType =
(RadioButton)findViewByld(rg.getCheckedRadioButtonId());
              String type = inType.getText().toString();
              String number = Number.getText().toString();
             if (type.matches("Decimal")){
                if(CDecimal.isChecked()){
                  Toast.makeText(MainActivity.this,"Decimal conversion = " +
number + "\n",Toast.LENGTH LONG).show();
                if (CBinary.isChecked()){
                  String ans =
Integer.toBinaryString(Integer.parseInt(number));
                  Toast.makeText(MainActivity.this,"Binary conversion = " +
ans + "\n",Toast.LENGTH LONG).show();
                if (COctal.isChecked()){
                  String ans = Integer.toOctalString(Integer.parseInt(number));
                  Toast.makeText(MainActivity.this,"Octal conversion = " +
ans + "\n",Toast.LENGTH_LONG).show();
                if (CHexa.isChecked()){
                  String ans = Integer.toHexString(Integer.parseInt(number));
                  Toast.makeText(MainActivity.this,"Hexadecimal conversion
= " + ans + "\n",Toast.LENGTH_LONG).show();
             } else if(type.matches("Binary")){
                if(CDecimal.isChecked()){
                  String ans = Integer.toString(Integer.parseInt(number,2));
                  Toast.makeText(MainActivity.this,"Decimal conversion = " +
ans + "\n",Toast.LENGTH_LONG).show();
                if (CBinary.isChecked()){
                  Toast.makeText(MainActivity.this, "Binary conversion = " +
number + "\n",Toast.LENGTH LONG).show();
                if (COctal.isChecked()){
                  String ans = Integer.toString(Integer.parseInt(number,2));
                  String integer = Integer.toOctalString(Integer.parseInt(ans));
                  Toast.makeText(MainActivity.this,"Octal conversion = " +
integer + "\n",Toast.LENGTH_LONG).show();
                if (CHexa.isChecked()){
                  String ans = Integer.toString(Integer.parseInt(number,2));
```

```
String integer = Integer.toHexString(Integer.parseInt(ans));
                  Toast.makeText(MainActivity.this, "Octal conversion = " +
integer + "\n",Toast.LENGTH_LONG).show();
             } else if(type.matches("Hexa")){
                if(CDecimal.isChecked()){
                  String integer =
Integer.toString(Integer.parseInt(number,16));
                  Toast.makeText(MainActivity.this,"Decimal conversion = " +
integer + "\n",Toast.LENGTH_LONG).show();
                if (CBinary.isChecked()){
                  String integer =
Integer.toString(Integer.parseInt(number,16));
                  String ans =
Integer.toBinaryString(Integer.parseInt(integer));
                  Toast.makeText(MainActivity.this,"Binary conversion = " +
ans + "\n",Toast.LENGTH_LONG).show();
                if (COctal.isChecked()){
                  String integer =
Integer.toString(Integer.parseInt(number,16));
                  String ans = Integer.toOctalString(Integer.parseInt(integer));
                  Toast.makeText(MainActivity.this,"Octal conversion = " +
ans + "\n",Toast.LENGTH_LONG).show();
                if (CHexa.isChecked()){
                  Toast.makeText(MainActivity.this,"Hexadecimal conversion
= " + number + "\n", Toast.LENGTH_LONG).show();
             } else if(type.matches("Octal")){
                if(CDecimal.isChecked()){
                  String integer = Integer.toString(Integer.parseInt(number,8));
                  Toast.makeText(MainActivity.this,"Decimal conversion = " +
integer + "\n",Toast.LENGTH LONG).show();
                if (CBinary.isChecked()){
                  String integer = Integer.toString(Integer.parseInt(number,8));
                  String ans =
Integer.toBinaryString(Integer.parseInt(integer));
                  Toast.makeText(MainActivity.this,"Binary conversion = " +
ans + "\n",Toast.LENGTH_LONG).show();
                if (COctal.isChecked()){
```

```
Toast.makeText(MainActivity.this,"Octal conversion = " +
number + "\n",Toast.LENGTH_LONG).show();

| if (CHexa.isChecked()){
| String integer = Integer.toString(Integer.parseInt(number,8));
| String ans = Integer.toHexString(Integer.parseInt(integer));
| Toast.makeText(MainActivity.this,"Hexadecimal conversion
= " + ans + "\n",Toast.LENGTH_LONG).show();
| }
| }
| }
| }
| }
| }
| }
```

Result.







