

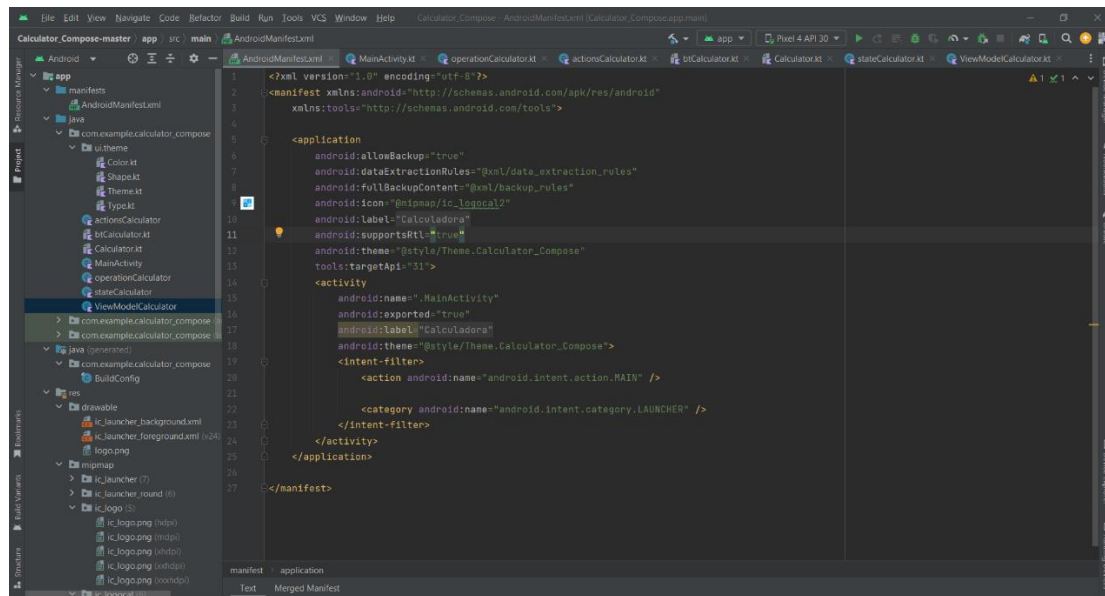
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Roll No.- 54

Registration number- 12204764

Section-KO305

➤ AndroidManifest.XML Code

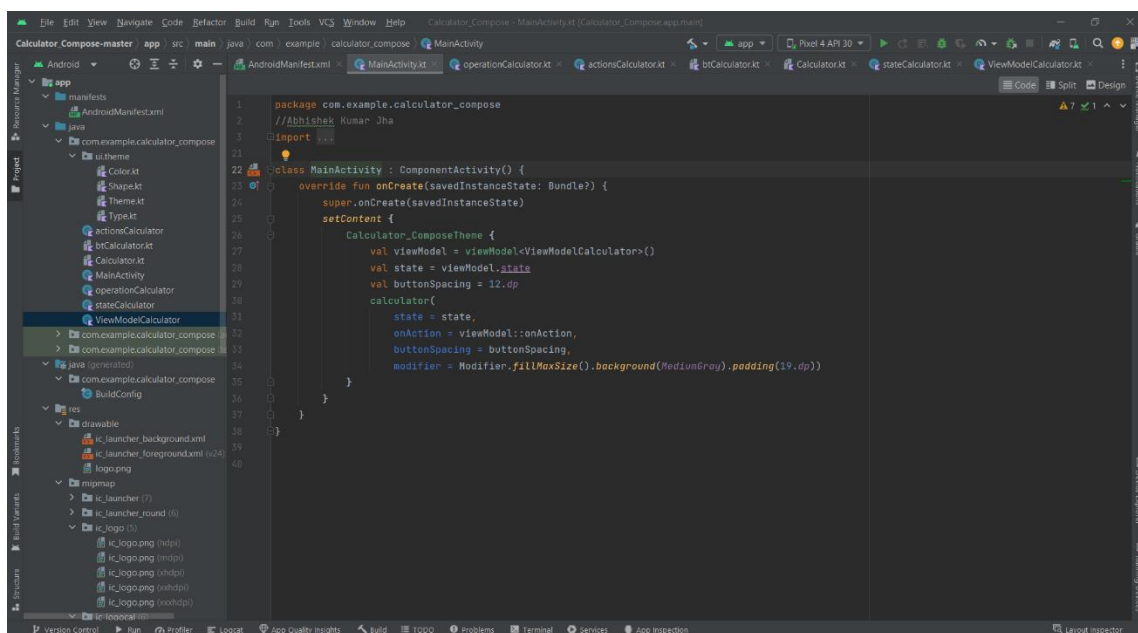


```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher2"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.Calculator_Compose"
        tools:targetApi="31">
        <activity
            android:name=".MainActivity"
            android:exported="true"
            android:label="@string/app_name"
            android:theme="@style/Theme.Calculator_Compose">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

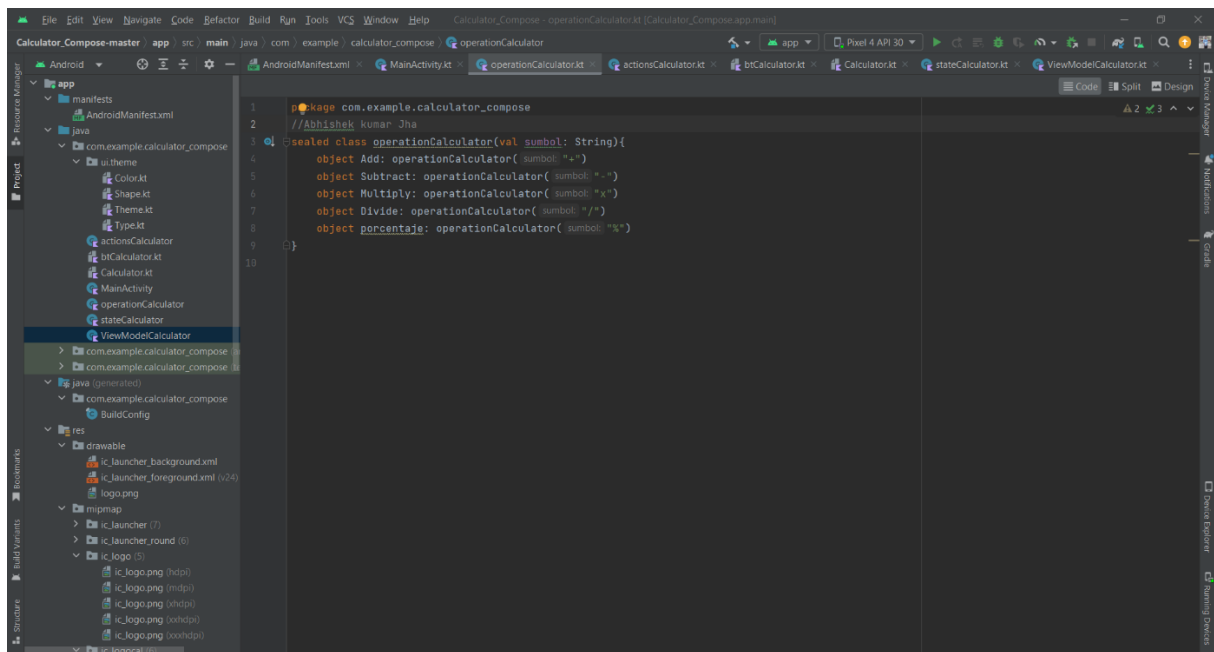
➤ MainActivity.kt Code



```
package com.example.calculator_compose
//Abhishek Kumar Jha
import androidx.appcompat.app.AppCompatActivity
import androidx.compose.foundation.layout.*
import androidx.compose.material.*
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.res.stringResource
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.unit.dp
import androidx.lifecycle.ViewModel
import androidx.lifecycle.ViewModelProvider
import androidx.lifecycle.ViewModelProvider.AndroidViewModelFactory.Companion.DEFAULT_KEY
import androidx.lifecycle.ViewModelProvider.AndroidViewModelFactory.Companion.DEFAULT_KEY

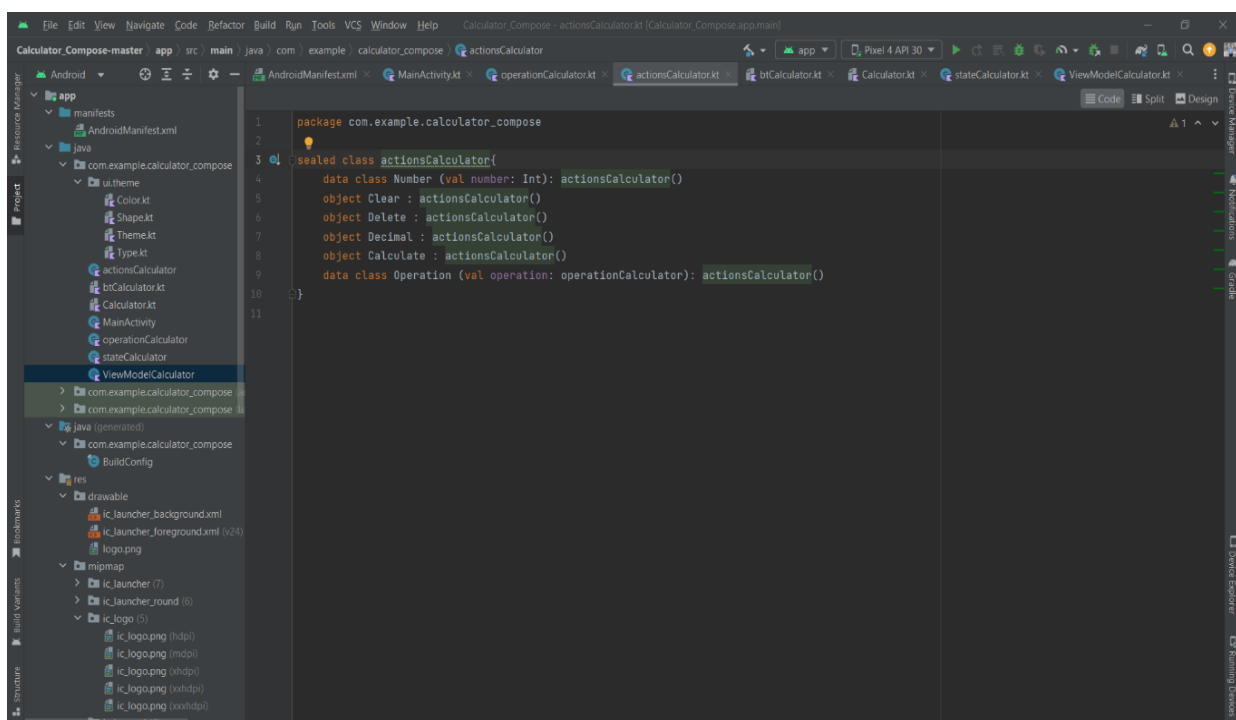
class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)
        val viewModel = ViewModelProvider(this).get(ViewModelCalculator::class)
        val state = viewModel.state
        val buttonSpacing = 12.dp
        calculator(
            state = state,
            onAction = viewModel.onAction,
            buttonSpacing = buttonSpacing,
            modifier = Modifier.fillMaxSize().background(MediumGray).padding(16.dp)
        )
    }
}
```

➤ OperationCalculator.kt Code



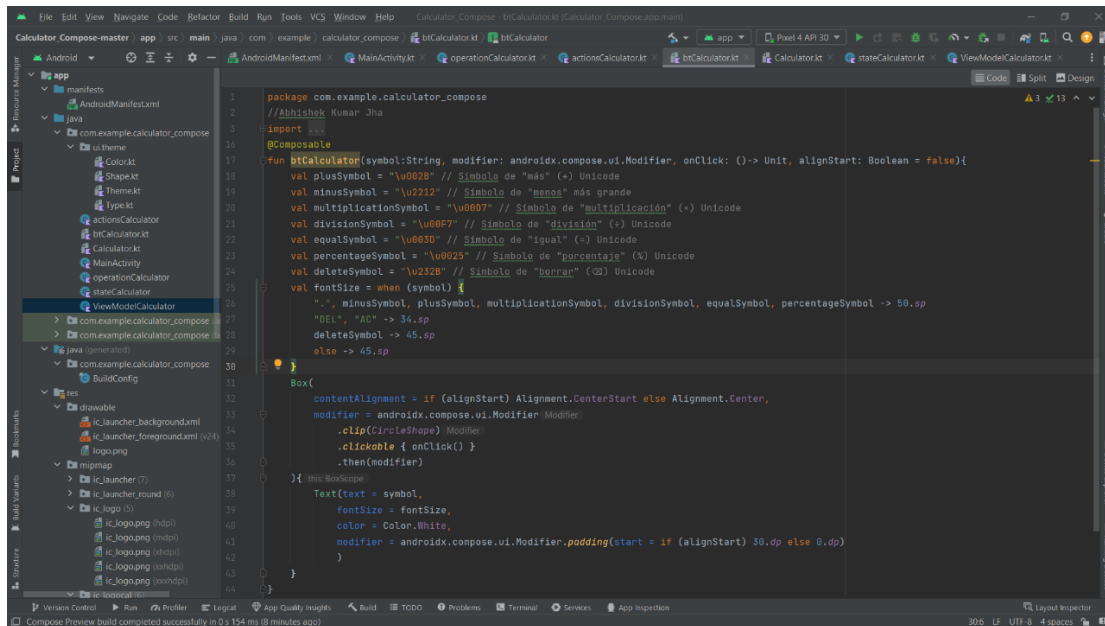
```
1 package com.example.calculator_compose
2 //Abhishek kumar Jha
3 sealed class operationCalculator(val symbol: String){
4     object Add: operationCalculator(" + ")
5     object Subtract: operationCalculator(" - ")
6     object Multiply: operationCalculator(" x ")
7     object Divide: operationCalculator(" / ")
8     object percentage: operationCalculator(" % ")
9 }
10
```

➤ actionsCalculator.kt Code



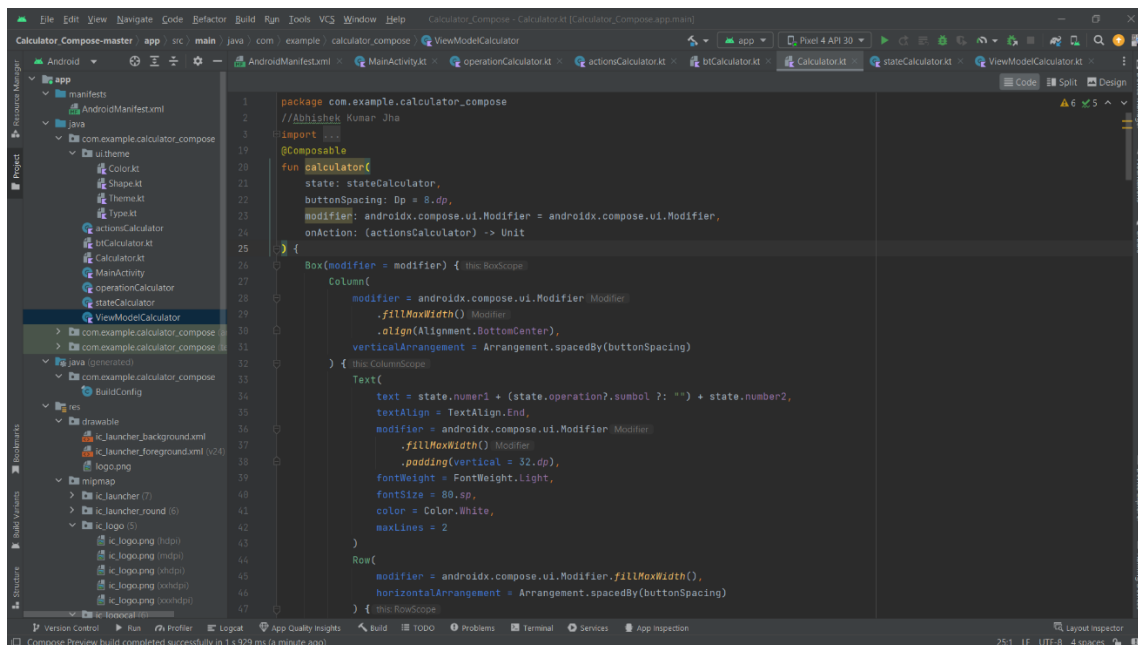
```
1 package com.example.calculator_compose
2
3 sealed class actionsCalculator{
4     data class Number (val number: Int): actionsCalculator()
5     object Clear : actionsCalculator()
6     object Delete : actionsCalculator()
7     object Decimal : actionsCalculator()
8     object Calculate : actionsCalculator()
9     data class Operation (val operation: operationCalculator): actionsCalculator()
10 }
11
```

➤ btCalculator.kt Code



```
1 package com.example.calculator_compose
2 //Abhishek Kumar Jha
3 import androidx.compose.foundation.layout.*
4 import androidx.compose.ui.Modifier
5 import androidx.compose.ui.text.Text
6 import androidx.compose.ui.text.font.FontSize
7 import androidx.compose.ui.text.font.FontWeight
8 import androidx.compose.ui.text.style.TextAlign
9 import androidx.compose.ui.unit.dp
10 import androidx.compose.ui.unit.sp
11
12 @Composable
13 fun btCalculator(symbol:String, modifier: androidx.compose.ui.Modifier, onClick: ()-> Unit, alignStart: Boolean = false){
14     val plusSymbol = "\u2013" // Símbolo de "más" (÷) Unicode
15     val minusSymbol = "\u2013" // Símbolo de "menos" (÷) Unicode
16     val multiplicationSymbol = "\u00D7" // Símbolo de "multiplicación" (×) Unicode
17     val divisionSymbol = "\u00F7" // Símbolo de "división" (÷) Unicode
18     val equalSymbol = "\u2190" // Símbolo de "igual" (=) Unicode
19     val percentageSymbol = "\u25A1" // Símbolo de "porcentaje" (%) Unicode
20     val deleteSymbol = "\u232B" // Símbolo de "borrar" (⌫) Unicode
21     val fontSize = when (symbol) {
22         "+", "-", "*", "/", "%", "\u232B" -> 34.sp
23         "DEL" -> 34.sp
24         else -> 45.sp
25     }
26
27     Box(
28         contentAlignment = if (alignStart) Alignment.CenterStart else Alignment.Center,
29         modifier = modifier.androidx.compose.ui.Modifier
30             .clip(CircleShape)
31             .clickable { onClick() }
32             .then(modifier)
33     ){
34         Text(
35             text = symbol,
36             fontSize = fontSize,
37             color = Color.White,
38             modifier = modifier.androidx.compose.ui.Modifier.padding(start = if (alignStart) 30.dp else 0.dp)
39         )
40     }
41 }
```

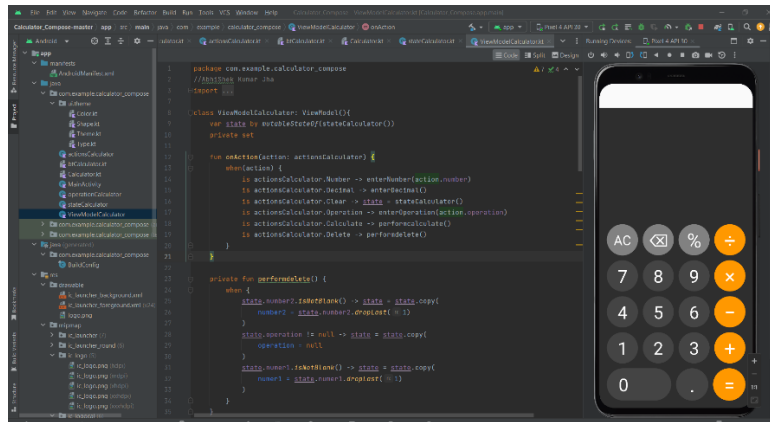
➤ Calculator.kt Code



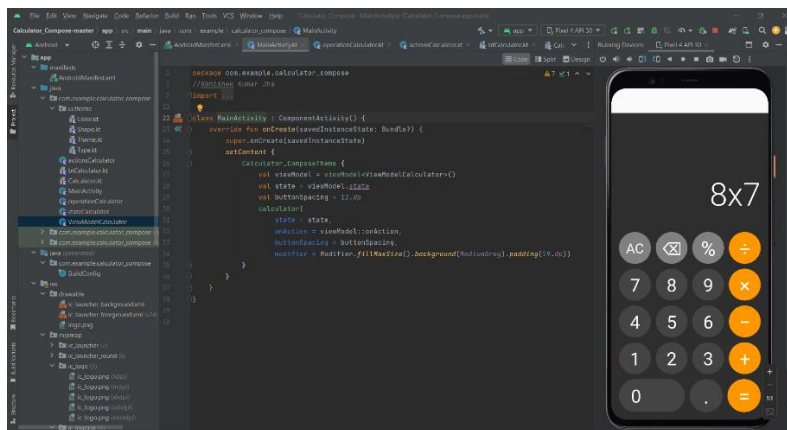
```
1 package com.example.calculator_compose
2 //Abhishek Kumar Jha
3 import androidx.compose.foundation.layout.*
4 import androidx.compose.ui.Modifier
5 import androidx.compose.ui.text.Text
6 import androidx.compose.ui.text.font.FontSize
7 import androidx.compose.ui.text.font.FontWeight
8 import androidx.compose.ui.text.style.TextAlign
9 import androidx.compose.ui.unit.dp
10 import androidx.compose.ui.unit.sp
11
12 @Composable
13 fun Calculator(modifier: Modifier) {
14     state = stateCalculator
15     buttonSpacing = 8.dp
16     modifier = androidx.compose.ui.Modifier = androidx.compose.ui.Modifier
17     onClick: (actionsCalculator) -> Unit
18
19     Box(modifier = modifier) {
20         Column(
21             modifier = androidx.compose.ui.Modifier(modifier)
22                 .fillMaxWidth()
23                 .align(Alignment.Center),
24             verticalArrangement = Arrangement.spacedBy(buttonSpacing)
25         ) {
26             Text(
27                 text = state.number1 + (state.operation?.symbol ?: "") + state.number2,
28                 textAlign = TextAlign.Center,
29                 modifier = androidx.compose.ui.Modifier(modifier)
30                     .fillMaxWidth()
31                     .padding(vertical = 32.dp),
32                 fontSize = 32.sp,
33                 color = Color.White,
34                 maxLines = 2
35             )
36             Row(
37                 modifier = androidx.compose.ui.Modifier.fillMaxWidth(),
38                 horizontalArrangement = Arrangement.spacedBy(buttonSpacing)
39             ) {
40                 // ... (rest of the code)
41             }
42         }
43     }
44 }
```

Output

- After Run the Code the Calculator App Shown



- Give the Number to perform calculation ,e.g.- here multiplication calculation Perform So give the 8x7.



- The Output Will Show After Multiply in Application

