Question 1:

Create a calculator app that can perform addition, subtraction, multiplication, and division. You must use the When statement.

MainActivity.kt

```kotlin
package com.example.mykotlinapp

import android.os.Bundle
import android.view.Menu
import android.view.MenuItem
import android.view.View
import android.widget.Button
import android.widget.EditText
import android.widget.Spinner
import android.widget.TextView
import android.widget.Toast
import androidx.activity.enableEdgeToEdge
import androidx.appcompat.app.AppCompatActivity
import androidx.core.view.ViewCompat
import androidx.core.view.WindowInsetsCompat

class MainActivity : AppCompatActivity(), View.OnClickListener {

    lateinit var spinner: Spinner
    lateinit var etA: EditText
    lateinit var etB: EditText
    lateinit var res: TextView
    lateinit var btn: Button
    lateinit var receivedText: TextView

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        enableEdgeToEdge()
        setContentView(R.layout.activity_main)
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v,
insets ->
            val systemBars =
insets.getInsets(WindowInsetsCompat.Type.systemBars())
            v.setPadding(systemBars.left, systemBars.top, systemBars.right,
systemBars.bottom)
            insets
        }

        etA = findViewById(R.id.et_a)
```

```kotlin
        etB = findViewById(R.id.et_b)
        res = findViewById(R.id.result)
        btn = findViewById(R.id.button)
        spinner = findViewById(R.id.spinner_operations)
        receivedText = findViewById(R.id.receivedText)

        btn.setOnClickListener(this)

        val text = intent.getStringExtra("EXTRA_TEXT")
        if (text != null) {
            receivedText.text = "Received: $text"
        }
    }

    override fun onClick(v: View?) {
        var a = etA.text.toString().toDouble()
        var b = etB.text.toString().toDouble()
        var result = 0.0
        when (spinner.selectedItem.toString()) {
            "add" -> {result = a + b}
            "sub" -> {result = a - b}
            "mul" -> {result = a * b}
            "div" -> {result = a / b}
        }
        res.text = "Result is $result"
    }

    override fun onCreateOptionsMenu(menu: Menu?): Boolean {
        val inflater = menuInflater
        inflater.inflate(R.menu.menu, menu)
        return true
    }

    override fun onOptionsItemSelected(item: MenuItem): Boolean {
        return when (item.itemId) {
            R.id.item1 -> {
                Toast.makeText(this, "item 1 selected",
Toast.LENGTH_SHORT).show()
                true
            }
            R.id.item2 -> {
                Toast.makeText(this, "item 2 selected",
Toast.LENGTH_SHORT).show()
                true
            }
            R.id.item3 -> {
                Toast.makeText(this, "item 3 selected!",
Toast.LENGTH_SHORT).show()
                true
```

```
            }
            else -> super.onOptionsItemSelected(item)
        }
    }
}
```

Activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <EditText
        android:id="@+id/et_a"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter first number" />

    <EditText
        android:id="@+id/et_b"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter second number" />

    <Spinner
        android:id="@+id/spinner_operations"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:entries="@array/operations_array" />

    <Button
        android:id="@+id/button"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Calculate" />

    <TextView
        android:id="@+id/result"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Result" />

    <TextView
```

```xml
        android:id="@+id/receivedText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:textSize="24sp"
        android:text="No data received" />
</LinearLayout>
```

OUTPUTS:

Choice2

Choice3

7

89

add

CALCULATE

Result is 96.0

No data received

override fun onCreateOptions...   R.menu.menu

q¹ w² e³ r⁴ t⁵   y⁶ u⁷ i⁸ o⁹ p⁰

a s d f g   g h j k l

z x c v   v b n m

?123 ,   .