Mobile programing
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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.View
import android.widget.Button
import android.widget.EditText
import android.widget.Spinner
import android.widget.TextView
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

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

```kotlin
btn.setOnClickListener(this)

        }

    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"
    }
}
```

Activity_main.xml

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

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/et_a"
        android:layout_margin="20dp"
        android:hint="Enter a " />
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/et_b"
        android:layout_margin="20dp"
        android:hint="enter b" />

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

```xml
    <TextView
        android:id="@+id/result"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="result"
        android:textSize="15sp"
        android:gravity="center"
        android:layout_margin="20dp"
        />

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

OUTPUTS:

66

79

mul

Result is 5214.0

Submit

q   w   e   r   t   y   u   i   o   p

a   s   d   f   g   g   h   j   k   l

z   x   c   v   v   b   n   m

?123   ,   .