

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

```
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)
```

```

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 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"/>

```

```
<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:

The screenshot shows a mobile application interface with a light purple background. At the top, there is a status bar with the time 1:35 and various icons. The app interface consists of two input fields: the first is labeled 'Enter a' and the second is labeled 'enter b'. Below these fields is a dropdown menu currently showing 'add'. Under the dropdown is a label 'result'. A large, rounded purple button with the text 'Submit' is positioned below the 'result' label. At the bottom of the screen, a standard Android keyboard is visible, featuring a search bar at the top that says 'Create an app on your choice ...'.

1:36



66

79

mul

Result is 5214.0

Submit



Create an app on your choice ...



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

,



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