JAVA CALCULATOR ASSIGNMENT

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BTech CSE AI/ML
Section B

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import java.util.Scanner;
class Calculator
    int add(int a, int b) { return a+b; }
    dolale add(double a, double b) { return a+b; }
    int add(int a, int b, int c) { return a+b+c; }
    int subtract(int a, int b) { return a-b; }
    double multiply(double a, double b) { return a*b; }
    double divide(int a, int b) {
    if (b==0) throw new ArithmeticException("
    Cannot divide by zero!");
    return (double) a/b;
    }
}
public class CalculatorApp {
    public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    Calculator c = new Calculator();
    int choice;
    do {
        System.out.println("\n---Calculator Menu---");
        System.out.println("1. Add");
        System.out.println("2. Subtract");
        System.out.println("3. Multiply");
        System.out.println("4. Divide");
        System.out.println("5. Exit");
        System.out.println("enter choice:");
        choice = sc.nextInt();
```

```
try{
    switch (choice) {
        case 1 -> {
            System.out.println ("1. Two ints |
            2. Two doubles | 3. Three ints ");
            int ch = sc.nextInt();
            if (ch == 1) {
                System.out.print ("enter two
                integers : ");
                System.out.println ("Result :"
                + c.add (sc.nextInt(),
                  sc.nextInt() ));
            } else if (ch == 2) {
                System.out.print ("enter two
                doubles :");
                System.out.println ("Result :"
                + c.add (sc.nextDouble(),
                sc.nextDouble() ));
            } else if (ch == 3) {
                System.out.print ("enter three
                integers : ");
                System.out.println ("Result :"
                + c.add (sc.nextInt(), sc.
                  nextInt(), sc.nextInt()));
            }
        }

        case 2 -> {
            System.out.print ("enter two
            integers : ");
            System.out.println ("Result :" +
            c.subtract (sc.nextInt(),
            sc.nextInt() ));
        }
```

```
case 3 -> {
        System.out.print ("enter two doubles");
        System.out.println ("Result :" +
        c.multiply (sc.nextDouble(),
        sc.nextDouble ()));
    }
case 4 -> {
        System.out.print ("Enter two integers");
        System.out.println ("Result : " +
        c.divide (sc.nextInt(),
        sc.nextInt ()));
    }
case 5 -> System.out.println ("Goodbye");
default -> System.out.println ("Invalid
        choice!");
    }
} catch (Exception e) {
    System.out.println ("Error: " + e.getMessage());
    sc.nextLine();
}
} while (choice != 5);
sc.close ();
}
}
```