

## Assignment 2 - Practicing Java

**Problem 1.** What will be printed to the console when the following Java file is compiled and run?

```
public class Problem1 {  
    public static void main(String[] args) {  
        for (int i = 10; i > 5; i--) {  
            int a = i / 3;  
            if (a % 2 == 0) {  
                System.out.println("no cap");  
            } else {  
                System.out.println("bruh");  
            }  
        }  
    }  
}
```

Explain your answer by evaluating variables at each loop iteration

**Problem 2.** Write a public static Java method that takes in 3 integers and returns the minimum using `Math.min(int a, int b)`

**Problem 3.** For a non-negative integer  $n$ ,  $n!$  (read as  $n$  factorial) is equal to  $n \times (n-1) \times (n-2) \times \dots \times 2 \times 1$ . For example,  $4! = 4 \times 3 \times 2 \times 1$ . We also define  $0!$  to be 1. Create a Factorial program that takes  $n$  as a command line argument and prints the value of  $n!$ . The class should have its own public static `factorial(int n)` method. Handle any exceptions that might be thrown.