

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 it's own public static `factorial(int n)` method. Handle any exceptions that might be thrown.