



EXPLORER

OPEN EDITORS

Welcome

Q1.java

WEEK11(28-10-2024)

LAB-07

Q1.java

q1.png

Q2.java

q2.png

Q3.java

Q4.java

q4.png

Q5.java

q5.png

q6.png

Welcome

Q1.java

Q1.java

```
1 public class Q1 {
2     public static void main(String[] args) {
3         int maxDivisors = 0;
4         int numberWithMaxDivisors = 0;
5
6         for (int i = 1; i <= 10000; i++) {
7             int divisorCount = countDivisors(i);
8             if (divisorCount > maxDivisors) {
9                 maxDivisors = divisorCount;
10                numberWithMaxDivisors = i;
11            }
12        }
13
14        System.out.println("Number with the largest number of divisors: " + numberWithMaxDivisors);
15        System.out.println("Number of divisors: " + maxDivisors);
16    }
17
18    private static int countDivisors(int number) {
19        int count = 0;
20
21        for (int i = 1; i * i <= number; i++){
22            if (number % i == 0){
23                count += 2;
24                if (i * i == number) {
25                    count--;
26                }
27            }
28        }
29        return count;
30    }
31 }
```

> OUTLINE

> TIMELINE

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

bash - Q1 + ▾ □ 🗑️ ... ^ ✕

- **student@da-HP-ProDesk-600-G4-MT:~/Desktop/422116/week11(28-10-2024)**\$ cd Q1
- **student@da-HP-ProDesk-600-G4-MT:~/Desktop/422116/week11(28-10-2024)/Q1**\$ ls
Ans.class Ans.java DivisorTask.class Q1.class Q1.java Result.class
- **student@da-HP-ProDesk-600-G4-MT:~/Desktop/422116/week11(28-10-2024)/Q1**\$ java Ans
Number with the largest number of divisors: 7560
Number of divisors: 64
- **student@da-HP-ProDesk-600-G4-MT:~/Desktop/422116/week11(28-10-2024)/Q1**\$ □

Run Terminal Help

...

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

● **student@da-HP-ProDesk-600-G4-MT**:~/Desktop/422116/week11(28-10-2024)/LAB-07\$ java Q1

Number with the largest number of divisors: 7560

Number of divisors: 64

● **student@da-HP-ProDesk-600-G4-MT**:~/Desktop/422116/week11(28-10-2024)/LAB-07\$ java Q2

Number with the largest number of divisors: 83160

Number of divisors: 128

Elapsed time: 21ms

Depositor-2 deposited: 100, New balance: 100

• **student@da-HP-ProDesk-600-G4-MT:~/Desktop/422116/week11(28-10-2024)/LAB-07\$** java Q3

Museum is now open.

Visitor entered. Visitors inside: 1

Visitor entered. Visitors inside: 2

Visitor entered. Visitors inside: 3

Visitor entered. Visitors inside: 4

Visitor entered. Visitors inside: 5

Museum is now closed. Only exits allowed.

Visitor exited. Visitors inside: 4

Visitor exited. Visitors inside: 3

Visitor exited. Visitors inside: 2

Visitor exited. Visitors inside: 1

Visitor exited. Visitors inside: 0

All visitors have exited. West thread stopping.

Simulation finished.

East thread interrupted.

○ **student@da-HP-ProDesk-600-G4-MT:~/Desktop/422116/week11(28-10-2024)/LAB-07\$**

Some keybinding
handled by Vis

Museum is now closed. Only exits allowed.

● ^Cstudent@da-HP-ProDesk-600-G4-MT:~/Desktop/422116/week11(28-10-2024)/LAB-07\$ java Q4

Thread-2 has reached the barrier.

Thread-3 has reached the barrier.

Thread-4 has reached the barrier.

Thread-1 has reached the barrier.

Thread-5 has reached the barrier.

Thread-5 has crossed the barrier.

Thread-2 has crossed the barrier.

Thread-1 has crossed the barrier.

Thread-3 has crossed the barrier.

Thread-4 has crossed the barrier.


```
● student@da-HP-ProDesk-600-G4-MT:~/Desktop/422116/week11(28-10-2024)/LAB-07$ java Q5
Depositor-1 deposited: 50, New balance: 150
Withdrawer-2 withdrew: 120, New balance: 30
Withdrawer-1 withdrew: 30, New balance: 0
Depositor-2 deposited: 100, New balance: 100
```