

**Use Callable and CompletableFuture to return a result from a task.**

1. Write a program to find the integer in the range of 1 and 111111 that has the largest number of divisors. The program will divide the task into several concurrent sub-tasks. Each sub-task processes at most 1000 integers and returns the result for integers that it processes. The result contains the integer with the largest number of divisors and that number of divisors. After all the sub-tasks have completed, all the returned (sub) results are compared to get the final result. A sample output is given below for the range of integers between 1 and 2500.

In the range of 1 to 2500, 1680 has the most divisors of 40

2. Write a program that computes 2 Fibonacci values, one using sequential calculation (e.g. recursion) and another using asynchronous task with `CompletableFuture`. Compare the time taken for these two calculations (recursion vs asynchronous).