

CS209 Practice4

Question 1

1. Given an integer array, please do following tasks:

(1) output all even numbers in the array.

Sample Input:

5

5 6 7 8 11

Sample Output:

6 8

(2) Output all odd numbers in the array.

Sample Input:

5

5 6 7 8 11

Sample Output:

5 7 11

(3) Output all prime numbers in the array.

Sample Input:

5

5 6 7 8 11

Sample Output:

5 7 11

(4) Output all prime numbers and bigger than 5 in the array.

Sample Input:

5

5 6 7 8 11

Sample Output:

7 11

You should try to use Predicate<T> interface.

Question 2

Give a sequence of integer numbers, output their quadratic sum.

Sample Input:

3

1 2 3

Sample Output:

14

You should try to use UnaryOperator<T>, Function<T, R> or BinaryOperator<T>.

Evaluation Criteria:

The practice will be checked on this to the next next lab class(**Mar.30**) by teachers or SAs. What will be tested:

1. That you understand every line of your own code, not just copy from somewhere
2. That your program compiles correctly (javac)
3. Correctness of the program logic
4. That the result is obtained in a reasonable time

This practice will contribute 1 mark to your overall grade. Late submissions within 2 weeks **after the deadline (Mar.30) will incur a **20% penalty**, meaning that you can only get 80% of the score.**