



Java Software Development

Homework 3

Deadline: 2017/03/23 23:55

Problem Description

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- A special number is a positive integer whose prime factors only include 2, 3, 5
- Write a program to determine whether a given number is a special number, and find the n^{th} one.
- For example, 1, 2, 3, 4, 5, 6, 8, 9, 10, 12 is the sequence of the first 10 special numbers.
- Given an equation $X=M$, you should print whether M is a special number. Or given another equation $Y=N$, you should print the N^{th} special number.
- For example:
 - Given $X=5$, you should print `true`.
 - Given $Y=9$, you should print 10.

Sample Input and Output

Keyboard Input	X=8
Output	true

Keyboard Input	X=13579
Output	false

Keyboard Input	Y=10
Output	12

Keyboard Input	Y=999
Output	51018336

Submission

- Please archive your source code to `STUDENT_ID.zip` (download the example zip file from Moodle) and upload to Moodle before deadline.
- Your zip file should follow the following format.
 - `STUDENT_ID.zip`
 - | - `src`
 - | - `META-INF`
 - | - `MANIFEST.MF`
 - All the source files (*.java) are put in the `src` directory.
 - The entry point (i.e. main class) of the program is specified in the `MANIFEST.MF` file.
- No late submission is accepted.

If you have any problem about this homework,
please contact TA: 黃琪恩 (tony4794@gmail.com)