

Python Programming Exam:

Theory:

Multiples of Y and X

Let's assume that Y is 3 and X is 5, so

If we list all the natural numbers below 10 that are multiples of X or Y, we get 3, 5, 6 and 9. The sum of these multiples is 23.

TASK:

The task is to create program that takes a file as the first command line argument. The file content is list of numbers, with 3 numbers per row separated by space and number of rows is undefined (can be something between 1 - infinite). First number in a row is X and the second is Y, third one is the goal number (as in theorem 10). The program has to search all multiples of X and Y which are below the third number, print it out to screen and also write results to file which was given as the second command line argument.

Program should short out output file by ascending order how many multiples certain row has.

Example input file content:

2 7 26
5 8 31

Example command line command: python my_fine_program.py input.txt wild_output.txt

Example screen output and output file content:

31: 5 8 10 15 16 20 24 25 30
26: 2 4 6 7 8 10 12 14 16 18 20 21 22 24