

Computer Purchase

Description

In order to increase your performance on the final exam, you decide that you need a new computer.

When determining what computer to buy, you narrow your search categories to:

- RAM (in gigabytes), denoted as R ;
- CPU speed (in megahertz), denoted as S ;
- disk drive space (in gigabytes), denoted as D .

You perform some analysis and determine that the “best” machine is the computer that has the largest value of the formula:

$$2R + 3S + D$$

Your task is to read a list of computers and then tell the user what computer is best.

Input Specification

The first line of input will be an integer n ($0 \leq n \leq 10$) indicating how many computers are being compared. If invalid input is received at this prompt, it should be repeated.

Each of the remaining n lines of input will contain a computer specification.

A computer specification is of the form:

- computer name (a string)
- the RAM available (an integer)
- the CPU speed (an integer)
- the disk drive space (an integer)

Exactly one space will separate the computer name, RAM, CPU speed, and the disk drive space on each input line. You may assume data will be provided correctly here. No error checking is required.

Output Specification

The output is the name of the best computer.

Example input/output sessions are provided on the following page.

Sample Input/Output Session – 1 (output in **bold** text, input in regular text)

How many specs will be provided?
4
Spec 1?
ABC 13 22 1
Spec 2?
DEF 10 20 30
Spec 3?
GHI 11 2 2
Spec 4?
JKL 20 20 20
The best computer for you is JKL.

Sample Input/Output Session – 2 (output in **bold** text, input in regular text)

How many specs will be provided?
pears
How many specs will be provided?
-1
How many specs will be provided?
5.3
How many specs will be provided?

How many specs will be provided?
3
Spec 1?
GalaxyJ7 1 1500 32
Spec 2?
BBPassport 3 2260 32
Spec 3?
iPhone7 2 2340 32
The best computer for you is iPhone7.

Implementation Notes

Review the example code provided in the repository for some tips on how to handle the input prompts that take in multiple pieces of information on one line.