

23

## Mario Prize

12 points

### Introduction

Mario has just won a contest on a website where he can choose two prizes from a given list. Although he won't have to pay for the prizes, if the total weight exceeds 3kg, he will have to pay shipping taxes.

Mario doesn't have any money, so he will have to choose a pair of prizes that together weigh 3kg or less. The website also allows the winner to exchange the chosen products for money. Let's help him maximize the benefits by creating a program that, given the following data table, returns which two objects from the list have the highest combined worth, as long as the combined weight does not exceed 3kg.

Products offered (example):

| Product               | Price (€) | Weight (Kg) |
|-----------------------|-----------|-------------|
| Laptop                | 2300      | 2,5         |
| TV 64"                | 4500      | 13,8        |
| Multifunction printer | 250       | 6,4         |
| Pocket printer        | 160       | 0,3         |
| Backpack              | 30        | 0,9         |
| Headset wireless      | 250       | 1,3         |
| Pendrive 128 Gb       | 140       | 0,2         |
| Keyboard              | 80        | 1,2         |
| Mouse                 | 150       | 0,5         |
| Projector             | 2400      | 4,6         |

### Input

- Vector containing 10 price values
- Vector containing 10 weight values

### Output

Mario chooses: prize A and prize B with a total profit of value EUR

NOTE: there will only be one solution. Print prize A and prize B sorted by the index value ( $A < B$ ).

## Example

### Input

2300 4500 250 160 30 250 140 80 150 2400

2.5 13.8 6.4 0.3 0.9 1.3 0.2 1.2 0.5 4.6

### Output

Mario chooses: prize 0 and prize 3 with a total profit of 2460 EUR