# Problem 1 – Hungry Garfield

You know that Garfield is a very lazy cartoon cat that is always hungry and, just like you and me, likes Italian food very much. His favorite dishes are pizza, lasagna and sandwiches. John is a talented cartoonist and sometimes he goes on a business trip here and there and Garfield has to stay home alone and take care of himself. Every time John is away for a long time he gives Garfield some money to make sure he is well fed. Garfield is a very smart cat, he can talk, he can buy pizza himself, but he doesn’t care about calculations, because cats don’t care about anything else but food and a good nap. He asks you to make a simple program that calculates whether the money John gave him would be enough to eat all the pizzas, lasagnas and sandwiches he wants.

You are given the **sum** of money **(in dollars)** that John gives the **prices** **of pizza, lasagna and sandwiches in leva**. Then you will be given the quantity of pizza, lasagna and sandwiches he would like to eat in order to be well fed. You have to **convert all the money to dollars**. If the money he wants to spend is equal or less than the money John gave him, he will be satisfied, otherwise he will be hungry and angry at John.

## Input

The input data should be read from the console.

* On the first line you will receive **money** -the money John gave to Garfield in dollars.
* On the second line you will receive the dollar exchange **rate.**
* On the third line will receive **pizzaPrice** -the price of pizza in leva.
* On the fourth line you will receive **lasagnaPrice** - the price of lasagna in leva.
* On the fifth line you will receive **sandwichPrice** - the price of sandwiches in leva.
* On the sixth line you will receive the **pizzaQuantity** – the quantity of pizza Garfield wants to eat.
* On the seventh line you will receive the **lasagnaQuantity** – the quantity of lasagna Garfield wants to eat.
* On the eighth line you will receive the **sandwichQuantity** – the quantity of sandwiches Garfield wants to eat.

The input data will always be valid and in the format described. There is no need to check it explicitly.

## Output

The output data should be printed on the console.

If the money John gave Garfield is more or equal to buy all the food he wants, print:

**Garfield is well fed, John is awesome. Money left: ${the money that has left}.**

If the money John gave Garfield is not enough, print:

**Garfield is hungry. John is a badass. Money needed: ${the money that is needed}.**

Moneyshould be always positive and formatted with two digits after the decimal point.

## Constraints

* The money John gave and the dollar rate will be a floating point number in the range [1 - 232].
* The prices of pizza, lasagna and sandwiches will be floating point numbers in the range [0 - 232].
* The quantity of pizza, lasagna and sandwiches will be integers in the range [0 - 232].
* Allowed working time for your program: 0.1 seconds.
* Allowed memory: 16 MB.

## Examples

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| --- | --- | --- |
| **Input** | **Comments** | **Output** |
| 50  1.55  5  4  3  5  5  1 | The money Garfiel needs is  5/1.55 \* 5 + 4/1.55 \* 5 + 3/1.55 \*1 = 30.97.  30.97 is less than 50, so the money John gave him is enough. | Garfield is well fed, John is awesome. Money left: $19.03. |

|  |  |
| --- | --- |
| **Input** | **Output** |
| 100  1.55  10  15  3  5  8  2 | Garfield is hungry. John is a badass. Money needed: $13.55. |