

# Seize the Fire

*The group of adventurers have gone on their first task. Now they have to walk through fire - literally. They have to use all of the water they have left. Your task is to help them survive.*

Create a program that calculates the water that is needed to put out a "fire cell", based on the given information about its "fire level" and how much it gets affected by water.

First, you will be given **the level of fire** inside the cell with the **integer value** of the **cell**, which represents the needed water to put out the fire. They will be given in the following format:

"{typeOfFire} = {valueOfCell}#{typeOfFire} = {valueOfCell}#{typeOfFire} = {valueOfCell}....."

Afterwards you will receive the **amount of water** you have for putting out the fires. There is a **range** of fire for each of the fire types, and if a cell's value is below or exceeds it, it is invalid and you don't need to put it out.

Type of Fire	Range
High	81 - 125
Medium	51 - 80
Low	1 - 50

If a cell is valid, you have to put it out by reducing the water with its value. Putting out fire also takes **effort** and you need to **calculate it**. Its value is equal to **25% of the cell's value**. In the end you will have to print the **total effort**. Keep putting out cells until you run out of water. If you **don't have enough water** to put out a given cell – **skip it and try the next one**. In the end, **print the cells you have put out** in the following format:

"Cells:

- {cell1}
- {cell2}
- {cell3}

.....

- {cellN}"

"Effort: {effort}"

In the end, print the total fire you have put out from all of the cells in the following format: "Total Fire: {totalFire}"

## Input / Constraints

- On the 1<sup>st</sup> line you are going to receive the **fires with their cells** in the format described above – **integer numbers in the range [1...500]**
- On the 2<sup>nd</sup> line, you are going to be given the **water** – **an integer number** in the range **[0...100000]**

## Output

- Print the cells, which you have put out in the following format:

"Cells:

- {cell1}
- {cell2}

- {cell13}
- {cell15}

.....

- {cell1N}"

- Print the effort, rounded 2 digits after the decimal separator in the following format:

"Effort: {effort}"

- Print the total fire put out

"Total Fire: {totalFire}"

## Examples

Input	Output
High = 89#Low = 28#Medium = 77#Low = 23 1250	Cells: - 89 - 28 - 77 - 23 Effort: 54.25 Total Fire: 217
Comments	
After reading the output, we start <b>checking</b> the <b>level of the fire</b> and its validity. The first is valid, so we <b>subtract the 89</b> from the amount of <b>water</b> – 1250, and the water becomes 1161. We need to calculate the <b>effort</b> , which is <b>25%</b> of 89. We will <b>add 89 to the total fire</b> we have put out. In the end the effort is 54.22 and the total fire: 217	
Input	Output
High = 150#Low = 55#Medium = 86#Low = 40#High = 110#Medium = 77 220	Cells: - 40 - 110 Effort: 37.50 Total Fire: 150