# Seize the Fire

*The group of adventurists 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 1st 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 2nd 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:

- {cell}

- {cell2}

- {cell3}

- {cell5}

……

- {cellN}"

* 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 **checking** the **level of the fire** and its validity. The first is valid, so we **subtract the 89** from the amount of **water** – 1250, and the water becomes 1161. We need to calculate the **effort**, which is **25%** of 89. We will **add 89 to the total fire** 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 |