**Google Seaches**

You will be given several lines of input and you must calculate how much **money Google makes from user searches**. On the **first line** you will receive **total days**. On the **second line** you will receive the **number of users (n)** that make google **searches for a single day**. Then, you will receive the **money** Google makes **from a single search of a user**. On the **next n lines** you will get the **words that each user has in his search**. You have to calculate the **total money from the searches for the given days**. However there are some **additional rules**:

* If the **words** a user uses are **greater than 5**, we **ignore the search** and we do not calculate the money from it
* If the search contains **only one word**, the **money from the search are doubled**
* **Money made by each third user** are **tripled.**

After calculating the total money, print them in the following format:

**“Total money earned for {days} days: {totalMoney}”**. The money should me **formatted to the second decimal point.**

**message**.

**Input**

* First line: total days, integer in range [0, 1000]
* Second line: number of users (n), integer in range [0, 10000]
* Third line: money per search, floating-point number in range [0, 5000]
* Next n lines: words in range [0, 10]

**Output**

* Print the output in the format described above

**Constraints**

* The **command will always be valid.**
* The messages **will always be one word string**.
* Allowed working **time** / **memory**: **100ms** / **16MB**.

**Examples**

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comments** |
| 5  2  5.5  6  1 | Total money earned for 5 days: 55.00 | We ignore the money from the first user. For the second user we have one word, so we double the money (11). Then we multiply them by 5 days, so we get a total money of 55.00  55 = (5.5 \* 2) \* 5 |
| 10  3  6  5  4  1 | Total money earned for 10 days: 480.00 |  |