## \* Legendary Farming

You’ve beaten all the content and the last thing left to accomplish is own a legendary item. However, it’s a tedious process and requires quite a bit of farming. Anyway, you are not too pretentious – any legendary will do. The possible items are:

* **Shadowmourne** – requires **250 Shards**;
* **Valanyr** – requires **250 Fragments**;
* **Dragonwrath** – requires **250 Motes**;

**Shards, Fragments** and **Motes** are the **key materials**, all else is **junk.** You will be given lines of input, such as   
**2 motes 3 ores 15 stones.** Keep track of the **key materials -** the **first** that reaches the **250 mark** **wins** the **race**. At that point, print the corresponding legendary obtained. Then, print the **remaining** shards, fragments, motes, ordered by **quantity** in **descending** order, then by **name** in **ascending** order, each on a new line. Finally, print the collected **junk** items, in **alphabetical** order.

### Input

* Each line of input is in format **{quantity} {material} {quantity} {material} … {quantity} {material}**

### Output

* On the first line, print the obtained item in format **{Legendary item} obtained!**
* On the next three lines, print the remaining key materials in descending order by quantity
  + If two key materials have the same quantity, print them in alphabetical order
* On the final several lines, print the junk items in alphabetical order
  + All materials are printed in format **{material}: {quantity}**
  + All output should be **lowercase**, except the first letter of the legendary

### Constraints

* The quantity-material pairs are between 1 and 25 per line.
* The number of lines is in range [1..10]
* All materials are case-insensitive.
* Allowed working time: 0.25s
* Allowed memory: 16 MB

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 3 Motes 5 stones 5 Shards  6 leathers 255 fragments 7 Shards | Valanyr obtained!  fragments: 5  shards: 5  motes: 3  leathers: 6  stones: 5 |

|  |  |
| --- | --- |
| **Input** | **Output** |
| 123 silver 6 shards 8 shards 5 motes  9 fangs 75 motes 103 MOTES 8 Shards  86 Motes 7 stones 19 silver | Dragonwrath obtained!  shards: 22  motes: 19  fragments: 0  fangs: 9  silver: 123 |