# Masterchef

*Do you believe you have what it takes to become the new Masterchef? For tonight’s challenge you have to use the ingredients in your basket to prepare 4 excellent dishes.*

First you will receive a sequence of **integers**, representing the number of ingredients in a single basket. After that you will be given another sequence of **integers** - the freshness level of the ingredients.

Your task is to **cook** them so you can impress the judges. The names of the dishes are listed in the table below with the exact freshness level.

|  |  |
| --- | --- |
| **Dish** | **Freshness Level needed** |
| Dipping sauce | 150 |
| Green salad | 250 |
| Chocolate cake | 300 |
| Lobster | 400 |

To cook a dish, you have to take the **first** **ingredient** **value** and the **last freshness level value**. The total freshness level is calculated by their **multiplication**.

* If the product of this operation **equals** one of the levels described in the table, you make the dish and **remove both** ingredient and freshness value.
* **Otherwise** you should **remove the freshness level**, then **increase** the ingredient value by **5**
  + **Remove the ingredient from the collection and add it again in last place, already increased by 5**.
* In case you have an ingredient with value **0** you have to **remove** it and continue cooking.

You need to **stop** **cooking** **only** when you **run out of ingredients** **or freshness level** values.

Your task is considered **successful** if you make at least **four** dishes - **one of each type**.

## Input

* The first line of input will represent the ingredients' values - **integers**, separated by **single space.**
* On the second line you will be given the freshness values - **integers** again, separated by **single space.**

## Output

* On the first line of output - print if you've succeeded in preparing the dishes
* "**Applause! The judges are fascinated by your dishes!**"
* "**You were voted off. Better luck next year.**"
* On the next output line - print the **sum** of the ingredients **only** if they are left **any** in the format: "**Ingredients left: {ingridientsSum}"**
* On the last few lines you have to print the dishes you have made ordered **alphabetically, but only the ones that were made at least once** in the format:

" **# {dish name} --> {amount}**"

## Constraints

* All of the ingredients' values and freshness level values will be **integers** in range **[0, 100].**
* We can have **more than one** cooked dish of the types specified in the table above.

## Examples

|  |  |  |
| --- | --- | --- |
| ****Input**** | ****Output**** | ****Comment**** |
| **10 10 12 8 10 12**  **25 15 50 25 25 15** | Applause! The judges are fascinated by your dishes!  **#** Chocolate cake **--> 2**  **#** Dipping sauce **--> 2**  **# Green salad --> 1**  **# Lobster --> 1** | First you take the **first** ingredient and the **last** freshness level value and **multiply** them - the result is 150 so we **make** Dipping sauce. Next we have product of 250 and the Green salad is **ready**. Then we **cook** the Chocolate cake by multiplying 12 and 25. The product of next ingredient value and freshness level value is 400 and we **make** Lobster. Next pair is 10 and 15, we multiply them and make one more Dipping sauce. The last multiplication of 12 and 25 equals 300 and we make one more Chocolate cake. There are **no more ingredients and freshness values** so we stop cooking, but we have **one of each** dish types and print the **proper** message. |
| **12 20 0 6 19**  **12 12 25** | **You were voted off. Better luck next year.**  **Ingredients left: 55**  **# Chocolate cake --> 1** | **The first pair is 12 and 25, we cook Chocolate cake and remove both of them.**  **Next we take 20 and 12 - the product is 240 - we **can't cook any meal**, so **we remove** the freshness level value, increase the ingredient value with 5 and add it back in last place.** **The next ingredient has value 0 - we **remove it and continue.****  **The next pair is 6 and 12 - again we can't make anything. After that we don't have more freshness level values, so **we stop cooking**.** **The rest of the ingredients are 19, 25, 11 with sum of 55.** |