Bombs

Ezio still is learning to make bombs. With their help, he will save civilization. We should help Ezio to make his perfect bombs.

You will be given a two sequence of integers, representing bomb effects and bomb casings.

You need to start from the first bomb effect and try to mix it with the last bomb casing. If the sum of their values is equal to any of the materials in the table below - create the bomb corresponding to the value and remove the both bomb materials. Otherwise, just decrease the value of the bomb casing by 5. You need to stop combining when you have no more bomb effects or bomb casings, or you successfully filled the bomb pouch.

Bombs:

Datura Bombs: 40 Cherry Bombs: 60

Smoke Decoy Bombs: 120

To fill the bomb pouch, Ezio needs three of each of the bomb types.

Input

- On the first line, you will receive the integers representing the bomb effects, separated by ", ".
- On the second line, you will receive the integers representing the bomb casing, separated by ", ".

Output

- On the **first** line of output print one of these rows according whether Ezio succeeded fulfill the bomb pouch:
 - "Bene! You have successfully filled the bomb pouch!"
 - "You don't have enough materials to fill the bomb pouch."
- On the **second** line print all bomb effects left:
 - If there are no bomb effects: "Bomb Effects: empty"
 - o If there are effects: "Bomb Effects: {bombEffect1}, {bombEffect2}, (...)"
- On the **third** line print all bomb casings left:
 - If there are no bomb casings: "Bomb Casings: empty"
 - o If there are casings: "Bomb Casings: {bombCasing1}, {bombCasing2}, (...)"
- Then, you need to print all created bombs and the count you have of them, ordered alphabetically:
 - o "Cherry Bombs: {count}"
 - "Datura Bombs: {count}"
 - "Smoke Decoy Bombs: {count}"

Constraints

- All of the given numbers will be valid integers in the range [0, 120].
- Don't have situation with negative material.



















Examples

Output
You don't have enough materials to fill the bomb pouch.
Bomb Effects: empty
Bomb Casings: empty
Cherry Bombs: 1
Datura Bombs: 2
Smoke Decoy Bombs: 1

Comment

- 1) 5 + 35 = 40 -> Datura Bomb. Remove both.
- 2) 25 + 25 = 50 -> can't create bomb. Bomb casing should be decreased with 5 -> 20
- 3) 25 + 20 = 45 -> can't create bomb. Bomb casing should be decreased with 5 -> 15
- 4) 25 + 15 = 40 -> Datura Bomb. Remove both

Input	Output
30, 40, 5, 55, 50, 100, 110, 35, 40, <mark>35</mark> , 100, 80 20, <mark>25</mark> , 20, 5, 20, 20, 70, 5, 35, 0, 10	Bene! You have successfully filled the bomb pouch! Bomb Effects: 100, 80 Bomb Casings: 20 Cherry Bombs: 3 Datura Bombs: 4 Smoke Decoy Bombs: 3

Comment

After creating a bomb with bomb effect 35 and bomb casing 25, have created 3 Cherry bombs, 4 Datura bombs, and 3 Smoke Decoy bombs. From all of the bomb types have 3 bombs and the program ends.

"Nothing is true; everything is permitted"













