# Problem 3. Witcher’s Inventory System

*As a young developer, you dream of someday working at* ***CD Project Red*** *and help them make “The Witcher 4”, but you don’t know where to start. Luckily* ***CD Project Red*** *heard that* ***YOU*** *are taking the* ***Fundamentals Mid Exam*** *at* ***SoftUni*** *and they have contacted* ***Nakov,*** *in order to add this* ***FINAL PROBLEM****, especially for* ***YOU.***

***They want you to create a basic Witcher’s Inventory System.***

## Input / Constraints

The game begins, and your character receives his starting items, with **unique** names**,** on a **single line**, separated by a **comma** and a **space** in the following format: **"{item1}, {item2}, {item3}, {item4}"**

On the second line, your character receives his **initial** inventory size. The inventory can later expand if you purchase more bags for your character and you will be able to carry more items.

Now since **CD Project Red**wants you to know about a special term called **"Game Loop"**, which is the ***heartbeat*** of a game, your inventory system will be receiving different input commands, until you get the command "heartbeat".

**Commands**:

* "add / {item}"
  + Receiving this command, you should add the given item at the **first** avaliable spot in your inventory.
  + If the item already **exists**, you should **print** "{item} already exists!".
* "swap / {index1} / {index2}"
  + You must find the item at index1 and change its place with the item on index2.
  + If there is an item at index1, but there is no item at index 2, we still do a swap, as the player is simply rearanging his items in the inventory. Beware of **invalid indexes!**
* "equip / {item}"
  + Some items can be equiped by the character and used in battle. Like a sword or armor! Receiving this command, you should find the given item and rename it to "**{item: equipped}**"**,** e.g if we have a sword in the inventory, we will rename it to "**{sword:equipped}**".
  + If the item does **NOT** **exist**, you should **print** "{item} does not exists!".
* "remove / {index}"
  + Remove the **item** on the given index. Beware of **invalid indexes!**
* "open inventory / default" or "open inventory / equipped"
  + Default mode prints **ALL** the items inside your inventory system, while equipped mode prints **ONLY** the equipped items. The print format for both is separated by a **comma** and a **space**:

**"{item1}, {item2}, {item3}"**

## Output

After receiving the appropriate command, print your **inventory** **list** in the **format described** above.

## Examples

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| --- |
| **Input** |
| normal sword, silver sword, wolfsbane, buckthorn  add / honey  swap / 0 / 1  open inventory / default  heartbeat |
| **Output** |
| silver sword, normal sword, wolfsbane, buckthorn, honey |

|  |
| --- |
| **Input** |
| normal sword, silver sword, wolfsbane, buckthorn  add / honey  equip / silver sword  remove / 3  open inventory / default  equip / normal sword  open inventory / equipped  heartbeat |
| **Output** |
| silver sword:equipped, normal sword, wolfsbane, honey  silver sword:equipped, normal sword:equipped |

*...* *a game where every hero wins the day with shiny armor and a smile ...*