# QA Back-End Technologies Basics

# Regular Exam II – 02.03.2024

## DVDs

Alice has a collection of DVDs that she wants to organize. She has a list of genres that she likes and a list of commands that tell her how to arrange her DVDs. Write a function dvd\_collection(dvds) that solves this problem.

The function receives an array. As the first element of the input array, you will have an integer **n**

As the first element of the input array, you will have an integer **n** – the number of DVDs.

On the next **n** elements are the DVDs' names.

After you have successfully extracted the DVDs, you will be navigating through a series of commands, each as element of the input array.

The commands will be as follows:

* "**Watch**" command – you must remove the DVD at the first position in the array and print: "**{DVD title} DVD watched!**"
* "**Buy {DVD title}**" – add the given DVD title at the end of the array
* "**Swap {start index} {end index}**" – swap the DVDs in the given index positions and print: "**Swapped!**"
* "**Done**" – the organizing is finished, and print DVD titles left if there are any: "**DVDs left: {DVD1}, {DVD2}, {DVD3}, …**"

In case there are no DVDs left, print: "**The collection is empty**".

The The program ends when there are no more commands or you receive a command "**Done**".

If a command does not match the pattern (unrecognized keyword, missing argument) it should be ignored.

Check if given **indexe**s are **valid**.

### Input

* As first element of the input array, you will receive an integer **n.**
* On the following **n** elements, the DVDs themselves.
* You will be receiving different **commands**, as following element of the input array, until the "**Done**" command is given.

### Output

On the first line print the remaining DVDs in the array in the following format: "**DVDs left: {DVD1}, {DVD2}, {DVD3}, …**"

In case there are no DVDs left, print "**The collection is empty**".

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| dvd\_collection (['3', 'The Matrix', 'The Godfather', 'The Shawshank Redemption', 'Watch', 'Done', 'Swap 0 1']) | The Matrix DVD watched!  DVDs left: The Godfather, The Shawshank Redemption |
| dvd\_collection (['5', 'The Lion King', 'Frozen', 'Moana', 'Toy Story', 'Shrek', 'Buy Coco', 'Swap 2 4', 'Done']) | Swapped!  DVDs left: The Lion King, Frozen, Shrek, Toy Story, Moana, Coco |
| dvd\_collection (['5', 'The Avengers', 'Iron Man', 'Thor', 'Captain America', 'Black Panther', 'Watch', 'Watch', 'Watch', 'Watch', 'Watch', 'Done']) | The Avengers DVD watched!  Iron Man DVD watched!  Thor DVD watched!  Captain America DVD watched!  Black Panther DVD watched!  The collection is empty |