

# QA Back-End Technologies Basics

## Regular Exam II – 02.03.2024

### 2. 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 **indexes** 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
<code>dvd_collection(['3', 'The Matrix', 'The Godfather', 'The Shawshank Redemption', 'Watch', 'Done', 'Swap 0 1'])</code>	The Matrix DVD watched! DVDs left: The Godfather, The Shawshank Redemption
<code>dvd_collection(['5', 'The Lion King', 'Frozen', 'Moana', 'Toy Story', 'Shrek', 'Buy Coco', 'Swap 2 4', 'Done'])</code>	Swapped! DVDs left: The Lion King, Frozen, Shrek, Toy Story, Moana, Coco
<code>dvd_collection(['5', 'The Avengers', 'Iron Man', 'Thor', 'Captain America', 'Black Panther', 'Watch', 'Watch', 'Watch', 'Watch', 'Watch', 'Done'])</code>	The Avengers DVD watched! Iron Man DVD watched! Thor DVD watched! Captain America DVD watched! Black Panther DVD watched! The collection is empty