



Tasks Planner

Create a program that helps you organize your daily tasks. First, you are going to **receive the hours each task takes** on a **single line, separated by space**, in the following **format**:

"{task₁} {task₂} {task₃}... {task_n}"

Each task takes **from 1 to 5 hours**. If its time is **set to 0** – it is **completed**. If its time is **set to a negative number** – the task is **dropped**.

Then you will start receiving **commands** until you read the **"End"** message. There are **six** possible commands:

- **"Complete {index}"**
 - Find the **task** on this **index** in your collection and complete it, if the **index exists**.
- **"Change {index} {time}"**
 - **Replace** the time needed of the **task** on the given index **with the time given**, if the **index exists**.
- **"Drop {index}"**
 - **Drop** the task on the given **index**, **setting its hour to -1**, if the **index exists**.
- **"Count Completed"**
 - Print the number of **completed** tasks.
- **"Count Incomplete"**
 - Print the number of **incomplete** tasks (this **doesn't include** the **dropped** tasks).
- **"Count Dropped"**
 - Print the number of **dropped** tasks (this **doesn't include** the **incomplete** tasks).

In the end, print the **incomplete tasks** on a **single line**, separated by a **single space** in the following format:

"{task₁} {task₂} {task₃}... {task_n}"

Input

- On the **1st line** you are going to receive the **time of each task**, separated by a single space.
- On the next **lines**, until the **"End"** command is received, you will be receiving commands.

Output

- Print the tasks in the **format described above**.

Examples

Input	Output
1 -1 2 3 4 5 Complete 4 Change 0 4 Drop 3 Count Dropped End	2 4 2 5
Comments	
<p>First, we receive the command "Complete 4" and we to complete the task on index 4. After this command, the task collection looks like this:</p> <p>1 -1 2 3 0 5</p> <p>Afterwards, we receive the "Change 0 4" command and we need to change the time of the task on index 0. The collection looks like this now:</p> <p>4 -1 2 3 0 5</p> <p>After, we receive the "Drop 3" command, which means we need to drop the task on index 3. The collection looks like this:</p> <p>4 -1 2 -1 0 5</p> <p>Then, we receive the "Count Dropped" command. The result is 2 as we have only 2 dropped tasks.</p> <p>In the end, we print all of the incomplete tasks. This is the result collection:</p> <p>4 2 5</p>	
1 2 3 4 5 4 0 3 2 1 Complete 0 Complete 1 Complete 2 Drop 3 Change 4 1 Count Completed End	4 1 4 3 2 1