# Chore Wars

Your task is to help Pesho understand what his wife is telling him and calculate how much time it will take him to do all the chores. You will receive commands until you receive the "**wife is happy**" line.

**Each valid command** will give you information about a chore. You will have to calculate how much time **each chore** will take and how much time it will take him **overall**. The command is **valid** if it follows one of the **following rules**:

* A valid command for doing the dishes always **starts** with **"<"** and **ends** with **">"** and has only **lowercase** **letters and digits**.
* A valid command for cleaning the house always **starts** with **"["** and **ends** with **"]"** and has only **uppercase** **letters and digits**.
* A valid command for doing the laundry always **starts** with **"{"** and **ends** with **"}"** and has any character in the middle.

All other commands are invalid, and you should just skip them. You have to **sum the numbers inside** **each command** and add them to the **total time** for the chore. In the end you have to **print the time** it will take Pesho for the chores in the format:

**"****Doing the dishes - {timeDishes} min."**

**"Cleaning the house - {timeCleaning} min."**

**"Doing the laundry - {timeLaundry} min."**

**"Total - {totalMinutes} min."**

## **Input / Constraints**

* Strings that you have to process until you receive text "**wife is happy**".

## **Output**

* After receiving "**wife is happy**" print all of the chore times in minutes in the format:
  + **"Doing the dishes – {timeDishes} min."**
  + **"Cleaning the house – {timeCleaning} min."**
  + **"Doing the laundry – {timeLaundry} min."**
* Print the total amount of time for the chores in hours and minutes in the following format:
  + **"Total - {totalMinutes} min."**
* Allowed working **time** / **memory**: **100ms** / **16MB**.

## **Examples**

|  |  |
| --- | --- |
| **Input** | **Output** |
| -^hr5a65j48<dd6f5h4dhfd>456sga\_+  DHdhy4\*3[T2HOU87KRC]sA/@  Sda%t]gf{%hjK8f34)!fG1re}-+htG%v  wife is happy | Doing the dishes - 15 min.  Cleaning the house - 17 min.  Doing the laundry - 16 min.  Total - 48 min. |
| Vo.|1zps {lo2a}zgVGk{1)N+  Asdad123zxc{3]  R[A [F67G9C]6e3C@  MVo.|1zpshM<9) <d85ifkh59votu>@  <dm0g2y34mw1kpds2>iD|"p  wife is happy | Doing the dishes - 39 min.  Cleaning the house - 22 min.  Doing the laundry - 2 min.  Total - 63 min. |