## \*Party Reservation Filter Module

You are a young and talented developer. The first task you need to do is to implement a filtering module to a party reservation software. First, The Party Reservation Filter Module (TPRF Module for short) is passed a list with invitations. Next the TPRF receives a sequence of commands that specify if you need to add or remove a given filter.

TPRF Commands are in the given format **{command;filter type;filter parameter}**

You can receive the following TPRF commands: "Add filter", "Remove filter" or "Print". The possible TPRF filter types are: "Starts with", "Ends with", "Length" and "Contains". All TPRF filter parameters will be a string (or an integer for the length filter).

The input will end with a "Print" command after which you should print all the party-goers that are left after the filtration. See the examples below:

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| Pesho Misho Slav  Add filter;Starts with;P  Add filter;Starts with;M  Print | Slav |
| Pesho Misho Jica  Add filter;Starts with;P  Add filter;Starts with;M  Remove filter;Starts with;M  Print | Misho Jica |