Tickets Scan

Your next task is to extract information about a flight.

You will be given **2 parameters**. The **first** one is a **string** you need to extract the information from. The **second** one will be the **information you need to print**.

The information to extract is as follows:

Passenger name:

- Starts with a **space** (' ')
- Consists of **2 or 3 names** (**upper and lower-case letters**)
- The names should be **separated by a single dash ('-')**
- Each name should **start with an upper-case letter**
- If there are **3 names**, **the second one should end with a dot ('.')**
- If there are **2 names**, **the second should not contain any dots**
- Ends with a **space (' ')**
- **Valid** examples with **2 names**: `'Test-Testov '`, `'V-N '`
- **Valid** examples with **3 names**: `' T-T.-Testov '`, `' Valid-V.-Name '`

Airport:

- Starts with a **space** (' ')
- Should consist of **3 upper-case letters**, the symbol '**/**' and **3 more upper-case letters**
- Ends with a **space (' ')**
- **Valid** airports are: `' SOF/VAR '`, `' VIE/AIR '`

Flight number:

- Starts with a **space (' ')**
- Followed by **1 to 3 upper-case letters**
- Followed by **1 to 5 digits**
- Ends with a **space (' ')**
- **Valid** flight numbers are: `' DWF24 '`, `' S43159 '`, `' OE314 '`

Company:

- Starts with dash and space `'- '`
- Followed by **one or more letters** (**starting with an upper-case letter**)
- Followed by `'*'`
- Followed by **one or more letters** again (**starting with an upper-case letter**)
- Ends with a space **(' ')**
- **Valid** companies: `'- Wizz*Air '`, `'- X*Y '`

Input

Two parameters: the string you have to extract the information from and the command for the output

Output

4 different type of outputs depending on the **second** parameter:

`'name'` — print `'Mr/Ms, {name}, have a nice flight!'`

`'flight'` — print `'Your flight number {flightNumber} is from {fromAirport} to {toAirport}.'`

`'company'` — print `'Have a nice flight with {companyName}.'`

`'all'` — print `'Mr/Ms, {name}, your flight number {flightNumber} is from {fromAirport} to {toAirport}. Have a nice flight with {company}.'`

The name should be printed **without the `'-'`** (if any) and **with spaces instead**:
`' STEF-T.-Stefanov ' -> 'STEF T. Stefanov'`.

The **company** should be printed **without the `'- '`** and the `'*'`:

`' - Wizz*Air ' -> 'Wizz Air'`.

The **flight number** should be printed **without the spaces in the front and back**:

`' OS806 ' -> 'OS806'`

Examples

Input	Output
`'ahah Second-Testov )*))&&ba SOF/VAR ela** FB973 - Bulgaria*Air -opFB900 pa-SOF/VAr//_- T12G12 STD08:45  STA09:35 ', 'all'`	Mr/Ms, Second Testov, your flight number FB973 is from SOF to VAR. Have a nice flight with Bulgaria Air.
`' TEST-T.-TESTOV   SOF/VIE OS806 - Austrian*Airlines T24G55 STD11:15 STA11:50 ', 'flight'`	Your flight number OS806 is from SOF to VIE.