

Problem 4 – Winning Ticket

Lottery is exciting. What is not, is checking a million tickets for winnings only by hand. So, you are given the task to create a program which automatically checks if a ticket is a winner.

You are given a **collection of tickets separated by commas and spaces**. You need to check every one of them if it has a winning combination of symbols.

A **valid ticket should have exactly 20 characters**. The winning symbols are '@', '#', '\$' and '^'. But in order for a ticket to be a winner, the same winning symbol should uninterruptedly repeat for at least **6 times** in both the **tickets left half** and the **tickets right half**.

For example, a valid winning ticket should be something like this:

`"Cash$$$$$$Ca$$$$$sh"`

The left half `"Cash$$$$$$"` contains `"$$$$$$"`, which is also contained in the tickets right half `"Ca$$$$$sh"`. A winning ticket should contain symbols repeating up to 10 times in both halves, which is considered a Jackpot (for example: `"$$$$$$$$$$$$$$$$"`).

Input

The input will be read from the console. The input consists of a **single line** containing all tickets **separated by commas and one or more white spaces** in the format:

- `"{ticket}, {ticket}, ... {ticket}"`

Output

Print the result for every ticket in the order of their appearance, each on a separate line in the format:

- **Invalid ticket** - `"invalid ticket"`
- **No match** - `"ticket \"{ticket}\" - no match"`
- **Match with length 6 to 9** - `"ticket \"{ticket}\" - {match length}{match symbol}"`
- **Match with length 10** - `"ticket \"{ticket}\" - {match length}{match symbol} Jackpot!"`

Constraints

- Number of tickets will be in range [0 ... 100]

Examples

Input	Output
Cash\$\$\$\$\$\$Ca\$\$\$\$\$sh	ticket "Cash\$\$\$\$\$\$Ca\$\$\$\$\$sh" - 6\$
\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$, aabb , th@@@@@eemo@@@@@ey	ticket "\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$" - 10\$ Jackpot! invalid ticket ticket "th@@@@@eemo@@@@@ey" - 6@
validticketnomatch:(ticket "validticketnomatch:(" - no match
123#####1#####2, 1234#####12^^^^^^^3, ^^^^^@@@@@^^^^^@@@@@	ticket "123#####1#####2" - 7# ticket "1234#####12^^^^^^^3" - no match ticket "^^^^^@@@@@^^^^^@@@@@" - no match