

Valid hex code

Your task is to write a function that determines whether a string is a valid hex code.

A hex code must begin with a pound key # and is exactly 6 characters in length. Each character must be a digit from 0-9 or an alphabetic character from A-F. All alphabetic characters may be uppercase or lowercase.

Input

The first line of input contains the hex code.

Output

The first line contains if the input is a valid hex code (true or false).

Sample input

Sample output

| | |
|----------|-------|
| #CD5C5C | true |
| #CD5C58C | false |