REGEX ASSIGNMENT

1). The time has a format: **hours:minutes**. Both hours and minutes have two digits, like 09:00.

Make a regex to find time in the string: **Lunch at 10:10 in the room 123:456.** In this task there's no need to check time correctness yet, so 25:99 can also be a valid result. The regex **should not** match 333:333.

2.) Create a function that finds the word "happiness" in the given string (not case sensitive). If found, return "Hurray!", otherwise return "There is no happiness.".

Example

findHappiness("Work makes me happy") -> There is no happiness. findHappiness("You give me the feeling of happiness") -> Hurray

3). Write a regular expression that matches only a prime **number**. Numbers will be presented as strings.

Example

"134" \rightarrow false

4). Create a function that will return an integer number corresponding to the amount of digits in the given integer num

Examples

num of digits(1000)
$$\rightarrow$$
 4

```
num_of_digits(12) \rightarrow 2
num_of_digits(1305981031) \rightarrow 10
```

- 5). Create a function that takes in a *number as a string* n and returns the number **without trailing and leading zeros**.
 - **Trailing Zeros** are the zeros *after* a decimal point which *don't* affect the value (e.g. the last three zeros in 3.4000 and 3.04000).
 - **Leading Zeros** are the zeros *before* a whole number which don't affect the value (e.g. the first three zeros in 000234 and 000230).

```
removeLeadingTrailing("230.000") → "230" removeLeadingTrailing("00402") → "402"
```

Notes

- Return a **string**.
- If you get a number with .0 on the end, return the *integer value* (e.g. return "4" rather than "4.0").
- If the number is 0, 0.0, 000, 00.00, etc... return "0".
- 6). Create a function that takes a word and returns true if the word has two consecutive identical letters.

Examples

```
doubleLetters("loop") → true
doubleLetters("yummy") → true
```

7). ATM machines allow 4 or 6 digit PIN codes and PIN codes cannot contain anything but exactly 4 digits or exactly 6 digits. Your

task is to create a function that takes a string and returns true if the PIN is valid and false if it's not.

Examples

```
validatePIN("1234") \rightarrow true
validatePIN("12345") \rightarrow false
```

8). Create 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.

Examples

```
isValidHexCode("#CD5C5C") \rightarrow true isValidHexCode("#EAECEE") \rightarrow true isValidHexCode("#CD5C&C") \rightarrow false
```

9). Create a function that takes an array of numbers and returns "Boom!" if the digit 7 appears in the array. Otherwise, return "there is no 7 in the array".

Examples

```
sevenBoom([1, 2, 3, 4, 5, 6, 7]) \rightarrow "Boom!" // 7 contains the number seven.
```

```
sevenBoom([8, 6, 33, 100]) \rightarrow "there is no 7 in the array" // None of the items contain 7 within them.
```

10). Create a function that takes a string, checks if it has the same number of x's and o's and returns either true or false.

- Return a boolean value (true or false).
- Return true if the amount of x's and o's are the same.
- Return false if they aren't the same amount.
- The string can contain any character.
- When "x" and "o" are not in the string, return true.

Examples

```
XO("ooxx") → true

XO("xooxx") → false

XO("ooxXm") → true

// Case insensitive.
```

Notes

- Remember to return true if there aren't any x's or o's.
- Must be case insensitive.