

1 - add

Write a function that returns the sum of two numbers.

Example

For `param1 = 1` and `param2 = 2`, the output should be

`add(param1, param2) = 3.`

Input/Output

- **[execution time limit] 4 seconds (js)**
- **[input] integer param1**
Guaranteed constraints:
`-1000 ≤ param1 ≤ 1000.`
- **[input] integer param2**
Guaranteed constraints:
`-1000 ≤ param2 ≤ 1000.`
- **[output] integer**
The sum of the two inputs.

```
function add(param1, param2) {  
  
}
```

2 - centuryFromYear

Given a year, return the century it is in. The first century spans from the year 1 up to and including the year 100, the second - from the year 101 up to and including the year 200, etc.

Example

- For `year = 1905`, the output should be `centuryFromYear(year) = 20`;
- For `year = 1700`, the output should be `centuryFromYear(year) = 17`.

Input/Output

- **[execution time limit] 4 seconds (js)**
- **[input] integer year**
A positive integer, designating the year.
Guaranteed constraints:
 $1 \leq \text{year} \leq 2005$.
- **[output] integer**
The number of the century the year is in.

```
function centuryFromYear(year) {  
  
}
```

3 - checkPalindrome

Given the string, check if it is a [palindrome](#). Palindrome is A string that doesn't change when reversed (it reads the same backward and forward).

Examples:

- "eye" is a palindrome
- "noon" is a palindrome
- "decaf faced" is a palindrome
- "taco cat" is **not** a palindrome (backwards it spells "tac ocat")
- "racecars" is **not** a palindrome (backwards it spells "sracecar")

Example

- For `inputString = "aabaa"`, the output should be `checkPalindrome(inputString) = true`;
- For `inputString = "abac"`, the output should be `checkPalindrome(inputString) = false`;
- For `inputString = "a"`, the output should be `checkPalindrome(inputString) = true`.

Input/Output

- **[execution time limit] 4 seconds (js)**
- **[input] string inputString**
A non-empty string consisting of lowercase characters.
Guaranteed constraints:
 $1 \leq \text{inputString.length} \leq 10^5$.
- **[output] boolean**
`true` if `inputString` is a palindrome, `false` otherwise.

```
function checkPalindrome(inputString) {  
  
}
```

4 - isLucky

Ticket numbers usually consist of an even number of digits. A ticket number is considered *lucky* if the sum of the first half of the digits is equal to the sum of the second half.

Given a ticket number n , determine if it's *lucky* or not.

Example

- For $n = 1230$, the output should be
`isLucky(n) = true;`
- For $n = 239017$, the output should be
`isLucky(n) = false.`

Input/Output

- **[execution time limit] 4 seconds (rb)**
- **[input] integer n**
A ticket number represented as a positive integer with an even number of digits.
Guaranteed constraints:
 $10 \leq n < 10^6$.
- **[output] boolean**
`true` if n is a lucky ticket number, `false` otherwise.

```
function isLucky(n) {  
  
}
```

5 - isIPv4Address

An IP address is a numerical label assigned to each device (e.g., computer, printer) participating in a computer network that uses the Internet Protocol for communication. There are two versions of the Internet protocol, and thus two versions of addresses. One of them is the [IPv4 address](#).

An identification number for devices connected to the internet. An IPv4 address written in dotted quad notation consists of four 8-bit integers separated by periods.

In other words, it's a string of four numbers each between 0 and 255 inclusive, with a "." character in between each number. All numbers should be present without leading zeros.

Examples:

- 192.168.0.1 is a valid IPv4 address
- 255.255.255.255 is a valid IPv4 address
- 280.100.92.101 is not a valid IPv4 address because 280 is too large to be an 8-bit integer (the largest 8-bit integer is 255)
- 255.100.81.160.172 is not a valid IPv4 address because it contains 5 integers instead of 4
- 1..0.1 is not a valid IPv4 address because it's not properly formatted
- 17.233.00.131 and 17.233.01.131 are not valid IPv4 addresses because they contain leading zeros

Given a string, find out if it satisfies the IPv4 address naming rules.

Example

- For `inputString = "172.16.254.1"`, the output should be `isIPv4Address(inputString) = true`;
- For `inputString = "172.316.254.1"`, the output should be `isIPv4Address(inputString) = false`.
316 is not in range [0, 255].
- For `inputString = ".254.255.0"`, the output should be `isIPv4Address(inputString) = false`.
There is no first number.

Input/Output

- **[execution time limit] 4 seconds (js)**
- **[input] string inputString**
A string consisting of digits, full stops and lowercase English letters.
Guaranteed constraints:
 $1 \leq \text{inputString.length} \leq 30$.
- **[output] boolean**
`true` if `inputString` satisfies the IPv4 address naming rules, `false` otherwise.

```
function isIPv4Address(inputString) {  
}
```