### PROBLEM 1

Given an array of objects "pets", each object containing the name, type and year the pet was born.

```
const pets = [
  { name: 'Max', type: 'dog', bornOn: 2018 },
  { name: 'Angel', type: 'cat', bornOn: 2015 },
  { name: 'Jasper', type: 'dog', bornOn: 2016 }
]
```

- 1. You are going to write a function getAge() that calculates the age of each pet, and returns a new array with the new values of the age added to each object.
- 2. You are going to write a function that returns an array containing only the dogs.
- 3. You are going to write a function that finds the pet having the name "Jasper" and returns the string "Jasper is 4 years old."

### **PROBLEM 2**

Write a function that takes an array and moves all of the zeros to the end, preserving the order of the other elements.

```
Ex.: [false,1,0,4,2,0,1,3,"Hello"] => [false,1,4,2,1,3,"Hello",0,0] (modifié)
```

## **PROBLEM 3**

Write a function that reverses every other word in a given string, then return the string. Throw away any leading or trailing whitespace,

while ensuring there is exactly one space between each word.

```
Ex.: "Hello world!" => "Hello !dlrow"
```

### **PROBLEM 4**

The goal of this exercise is to convert a string to a new string where each character in the new string is "(" if that character appears only once in the original string, or ")" if that character appears more than once in the original string. Ignore capitalization when determining if a character is a duplicate.

Ex:

```
"din" => "((("

"recede" => "()()()"

"Success" => ")())())"

"(( @" => "))(("
```

# **PROBLEM 5**

```
const obj= {name:"nourhen", adress:{city:{name:"boumhal", cpu:123}},
bootcamp:{name:"fullstackjs", place:"gomycode"} }

// add a key age in obj

const obj2={...obj, age:26}

// add a key year in bootcamp

const obj3={...obj, bootcamp:{...obj.bootcamp, year:2021}}

// change city name to tunis

const obj4= {...obj, adress: {...obj.adress, city: {...obj.adress.city, name:'tunis'}}}
```