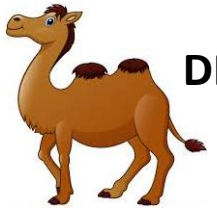

CLEAN CODE !!!!

1- Meaning full names

Naming convention

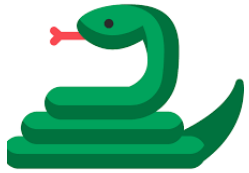
CAMEL CASE

thisIsAnExample



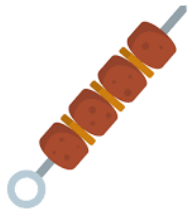
DROMEDARY CASE

ThisIsAnExample



SNAKE CASE

this_is_an_example



KEBAB CASE

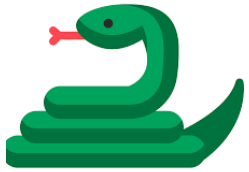
this-is-an-example

Naming convention

CAMEL CASE

thisIsAnExample

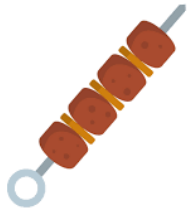
JAVA PHP JS



SNAKE CASE

this_is_an_example

PYTHON



KEBAB CASE

this-is-an-example

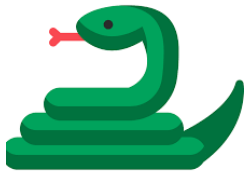
Naming convention

WhatIsThisOne

A

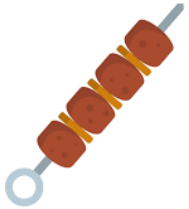
CAMEL CASE

B



SNAKE CASE

C



KEBAB CASE

D

DROMEDARY CASE

E

NONE OF THEM

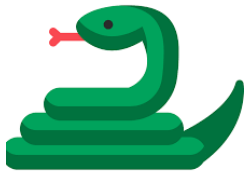
Naming convention

WhatIsThisOne

A

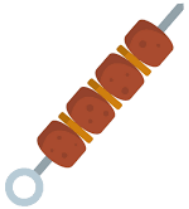
CAMEL CASE

B



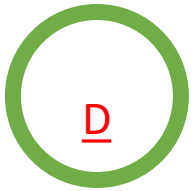
SNAKE CASE

C



KEBAB CASE

D



DROMEDARY CASE

E

NONE OF THEM

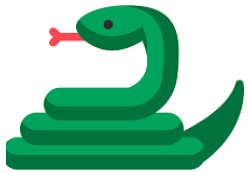
Naming convention

And_this_one

A

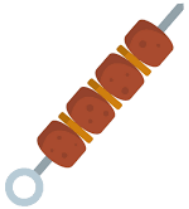
CAMEL CASE

B



SNAKE CASE

C



KEBAB CASE

D

DROMEDARY CASE

E

NONE OF THEM

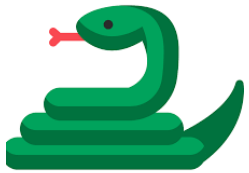
Naming convention

And_this_one

A

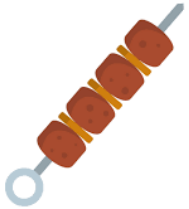
CAMEL CASE

B



SNAKE CASE

C



KEBAB CASE

D

DROMEDARY CASE

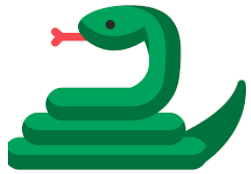
E

NONE OF THEM

Usualy

methodsAreNamedWithCamelCase
variablesAreAlsoCamelCase

CONSTANTS_ARE_IN_ALL_CAPS_WITH_UNDERSCORES

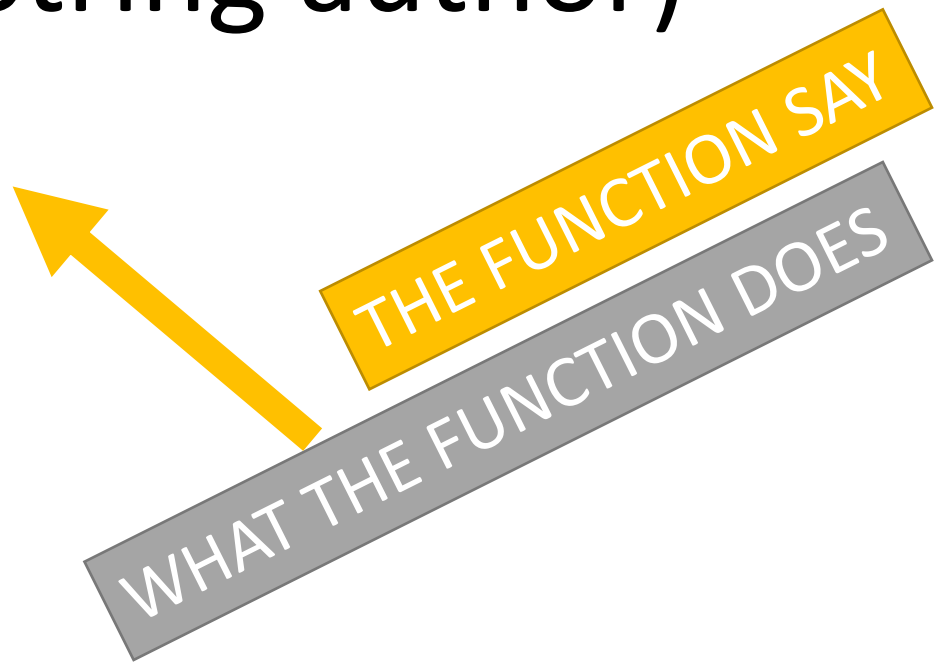


ClassesAreNamedWithDromedaryCase

packages.are.lowercase.and.separated.by.dots

What does this function do

getBooksFromAuthor(String author)



How to write a function name ?

getBooksFromAuthor(String author)

ACTION

OBJECT

ADDITIONAL INFO

How to write a function name ?

ACTION

- is
- get
- remove
- update
- clear

What would be a better name for this function

```
function xxxxx(n:number) : boolean {
    return n %2 == 0;
}
```

A	B	C	D
even	getEven	isEven	isEvenNumber

What would be a better name for this function

```
function xxxxx(n:number) : boolean {
    return n %2 == 0;
}
```

A

even

B

getEven

C

isEven

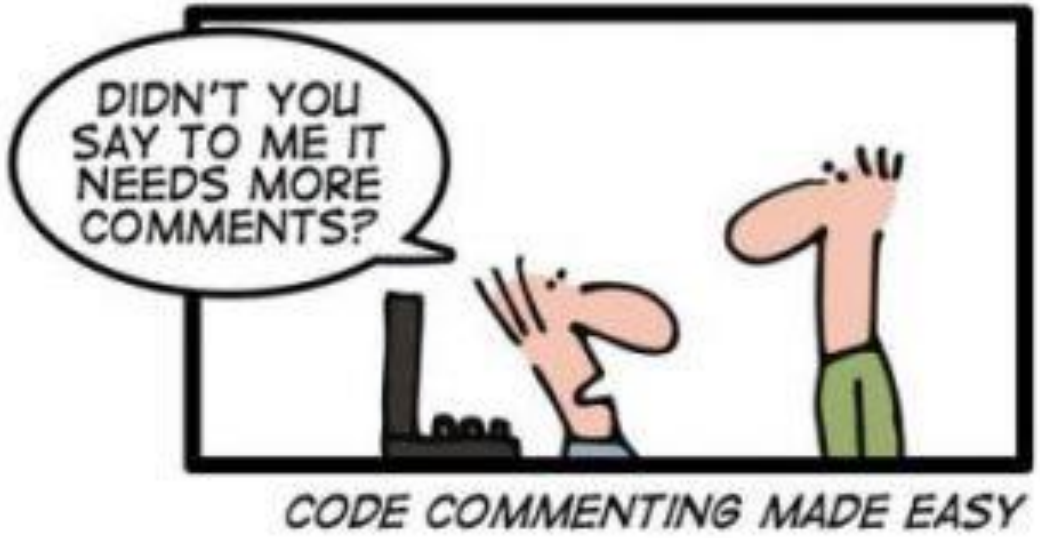
D

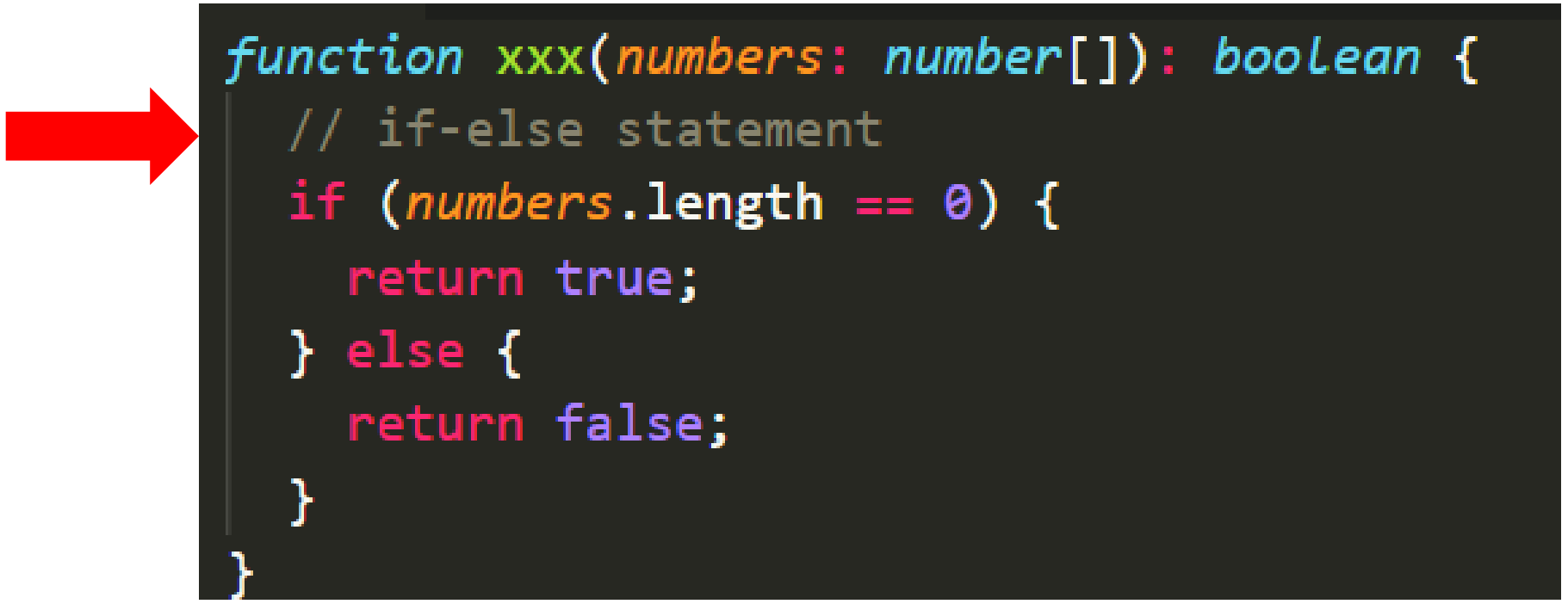
isEvenNumber

20 min

ACTIVITY-1 !!

2 - Code commenting

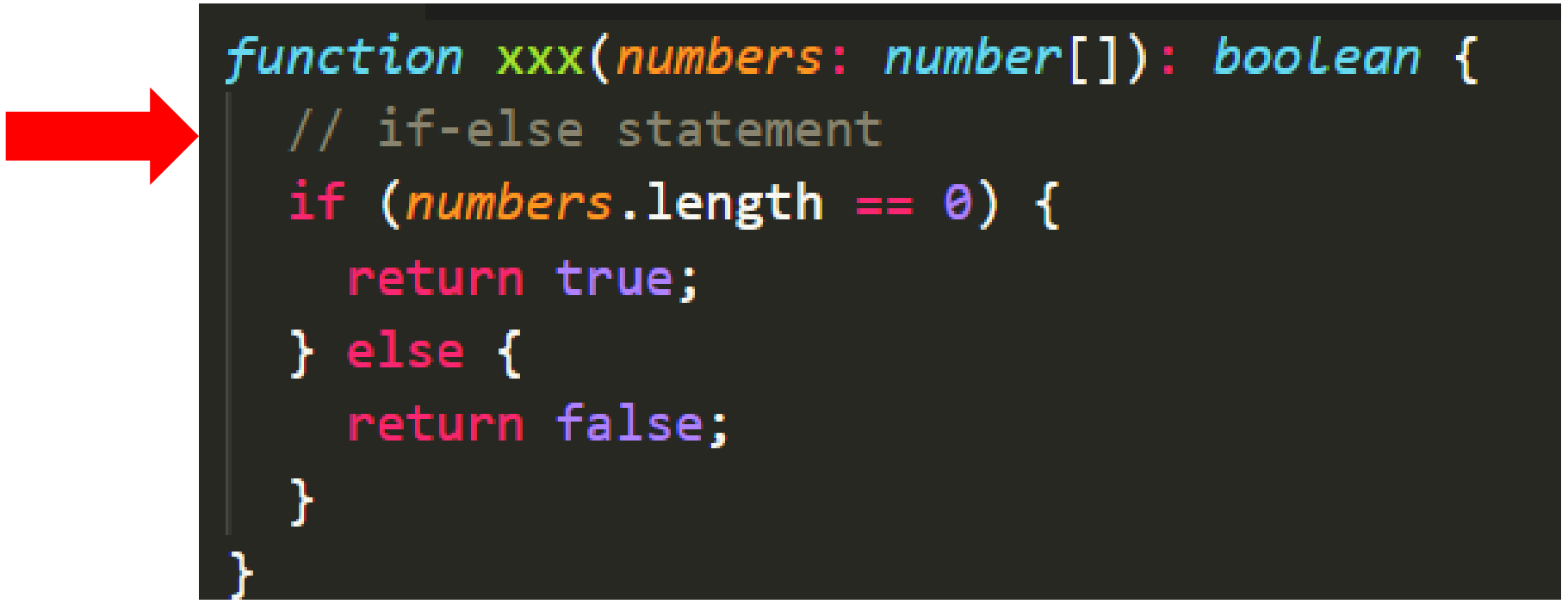




```
function xxx(numbers: number[]): boolean {
  // if-else statement
  if (numbers.length == 0) {
    return true;
  } else {
    return false;
  }
}
```

A Good comment

B Bad comment



```
function xxx(numbers: number[]): boolean {
  // if-else statement
  if (numbers.length == 0) {
    return true;
  } else {
    return false;
  }
}
```

A Good comment

B Bad comment

When to comment ?

To **divide problems** into sub problems

```
// 1. Get all list students scores

// 2. Compute the sum of students scores

// 3. Return true if sum is greater than 50
```

To **specify the meaning** of a class/function

```
/**
 * Tell whether or not the number is positive
 * @param the number
 * @return true if positive (or 0), false otherwise
 */
function isPositive(n: number): boolean {
  return n >= 0;
}
```

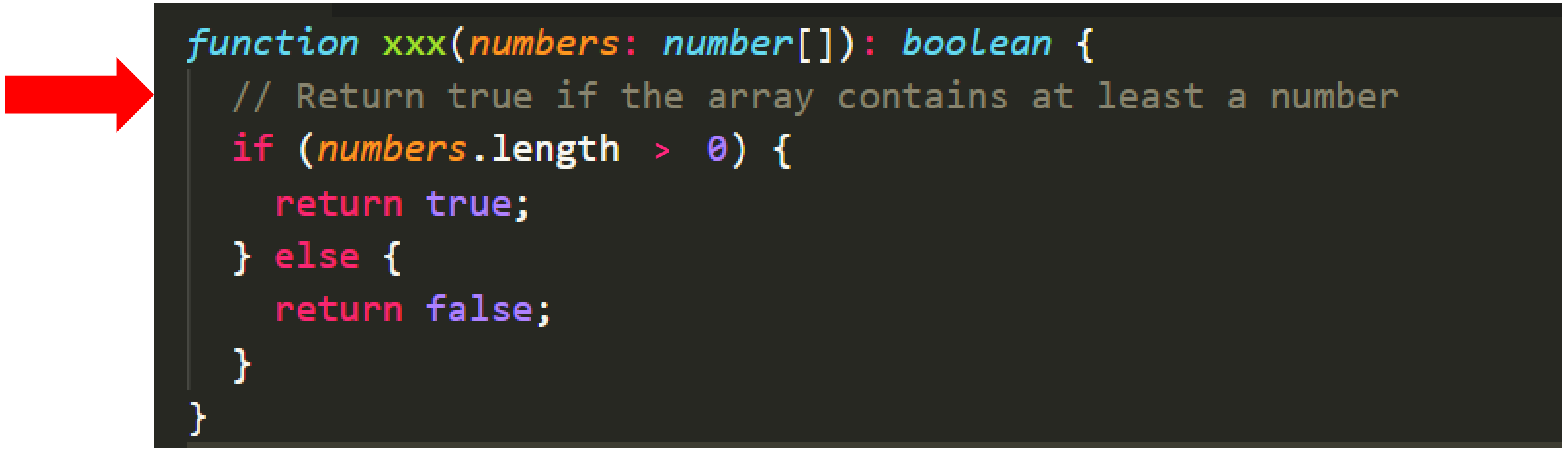
A method comment

```
/**
 * Tell whether or not the given number is in the range
 * @param    num, number
 * @param    min, the min range
 * @param    max, the max range
 * @return   true if the number is in the range
 */
function isInRange(num: number, min:number, max:number): boolean
```

Short description

Parameters definitions

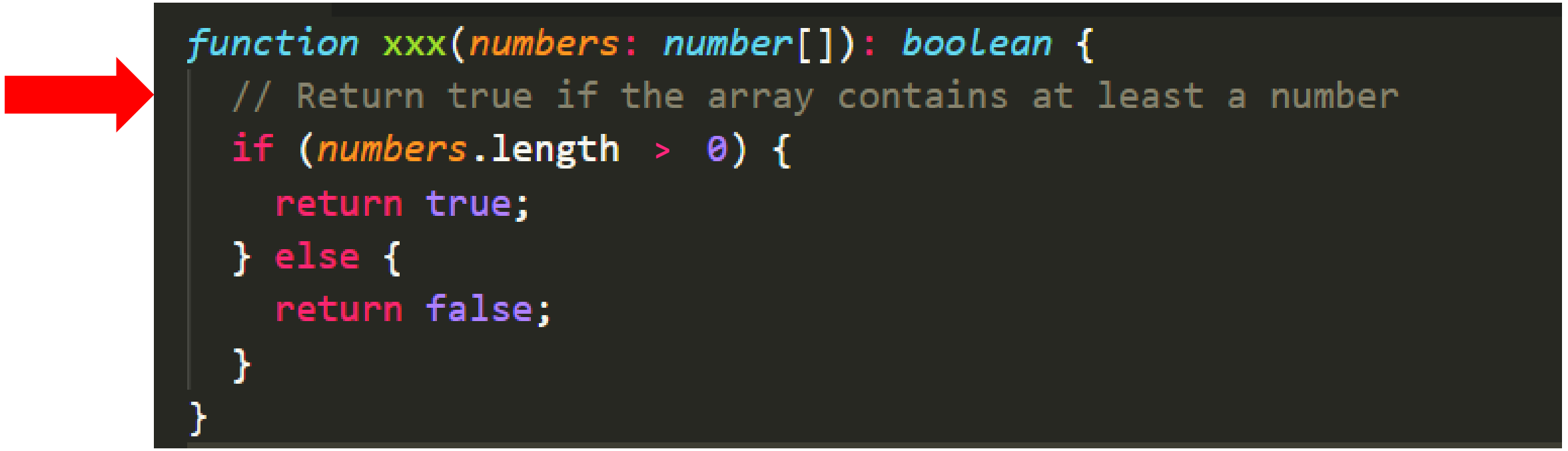
Return definitions



```
function xxx(numbers: number[]): boolean {
  // Return true if the array contains at least a number
  if (numbers.length > 0) {
    return true;
  } else {
    return false;
  }
}
```

A Good comment

B Bad comment



```
function xxx(numbers: number[]): boolean {
  // Return true if the array contains at least a number
  if (numbers.length > 0) {
    return true;
  } else {
    return false;
  }
}
```

A Good comment

B Bad comment

20 min

ACTIVITY-2 !!

3 – Do not repeat yourself (DRY)

```
// count the number of mango
let fruits = ["banana", "banana", "apple", "banana", "mango", "mango"];
let numberOfMango = 0;
for (let fruit of fruits) {
  if (fruit === "mango") {
    numberOfMango++;
  }
}

// count the number of carrot
let vegetables = ["tomato", "potato", "carrot", "tomato", "potato", "tomato"];
let numberOfCarrot = 0;
for (let vegetable of vegetables) {
  if (vegetable === "carrot") {
    numberOfCarrot++;
  }
}

// count the number of rady
let teachers = ["rady", "rith", "rith", "rady", "ronan", "channak"];
let numberOfRady = 0;
for (let teacher of teachers) {
  if (teacher == "rady") {
    numberOfRady++;
  }
}
```

Does this code contain repetition ?

10 min

Open ACTIVITY-3- DRY.ts and try to change this code to **avoid repetition**

```
// count the number of mango
let fruits = ["banana", "banana", "apple", "banana", "mango", "mango"];
let numberOfMango = 0;
for (let fruit of fruits) {
  if (fruit === "mango") {
    numberOfMango++;
  }
}

// count the number of carrot
let vegetables = ["tomato", "potato", "carrot", "tomato", "potato", "tomato"];
let numberOfCarrot = 0;
for (let vegetable of vegetables) {
  if (vegetable === "carrot") {
    numberOfCarrot++;
  }
}

// count the number of rady
let teachers = ["rady", "rith", "rith", "rady", "ronan", "channak"];
let numberOfRady = 0;
for (let teacher of teachers) {
  if (teacher == "rady") {
    numberOfRady++;
  }
}
```

TIPS:
You can use a function !!

20 min

ACTIVITY-3 !!

TO SUM UP

- ✓ Define **meaningful** variables , functions and class **names**
- ✓ **Comment** your code
- ✓ Do **not repeat yourself** (DRY)