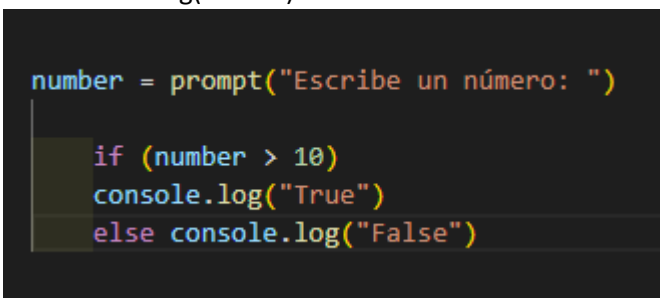
Exersice 1: Logical

true	&&	true	=	true
false	&&	true	=	false
true	&&	false	=	false
false	&&	false	=	false
true	||	true	=	true
true	||	false	=	true
false	||	true	=	true
false	||	false	=	false
!(false	||	true)	=	false
!(false	&&	true)	=	true
¡false	&&	true	=	true
¡true	&&	true	=	false
¡false	||	false	=	true

*** Exercise #1**

Create a function that takes in one number and checks if the number is greater than 10. Print out to the console true if it is greater and false otherwise.

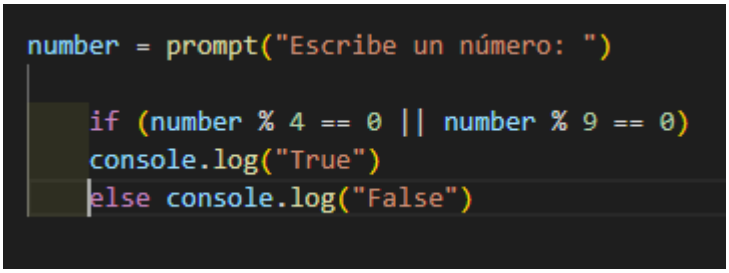
```
number = prompt("Escribe un número: ")
if (number > 10)
console.log("True")
else console.log("False")
```



*** Exercise #2**

Create a function that takes in one number and checks if it is divisible by 4 or divisible by 9. Print out to the console true if a number if divisible by 4 or 9, and false if a number is not divisible by either number.

```
number = prompt("Escribe un número: ")
if (number % 4 == 0 || number % 9 == 0)
console.log("True")
else console.log("False")
```



*** Exercise 1:**

We want to check if a string is empty. If a string is not empty, we want to print out the first character of that string. If a string is empty, print out a text saying "This string is empty"

```
function checkEmptyString(str) {
 if (str == "")
 console.log("This string is empty")
 else console.log(str[0])
```

}

// Example test, should return a
checkEmptyString("apple");

```
function checkEmptyString(str) {
    if (str == "")
    console.log("This string is empty")
    else console.log(str[0])
}

  // Example test, should return a
checkEmptyString("apple");
```

*** Exercise 2:**

We want to compare two strings and check if they are the same - case insensitive. Return a boolean - true if the two strings are the same, and false if they are not

function checkTwoStringsSame(str1, str2) {
if (str1.toLowerCase == str2.toLowerCase)
console.log("True")
else console.log("False")
}

// Example test, should return true
checkTwoStringsSame("String1", "string1");

```
function checkTwoStringsSame(str1, str2) {
    if (str1.toLowerCase == str2.toLowerCase)
    console.log("True")
    else console.log("False")
    }

    // Example test, should return true
    checkTwoStringsSame("String1", "string1");
```

Ejercicio 3 User Input Fork:

* Create a function that takes in 2 inputs (using prompt) and goes through the 5 arithmetic operators (+, -, /, *, %). The expected output on the console is:

* `The sum is x` -> x is the calculated sum

* `The subtraction is y` -> y is the calculated difference

* `The multiplication is z` -> z is the calculated multiplication

* `The division is w` -> w is the calculated division

* `The remainder is q` -> q is the calculated remainder

```
function mathematicOperations() {
    num1 = parseInt(prompt("Escribe un número: "),10);
    num2 = parseInt(prompt("Escribe otro número: "),10);

    console.log("The sum is x = " + (num1+num2))
    console.log("The subtraction is y = " + (num1-num2))
    console.log("The multiplication is z = " + (num1*num2))
    console.log("The division is w = " + (num1/num2))
    console.log("The remainder is q = " + (num1%num2))
    }

    mathematicOperations();
```

PRACTICE:

Part 1:

Write a program where a user enters the number of tasks they have completed. The program returns one of the following labels to the console:

Failed

Insufficient

Good

Excellent

Error

based on the conditions:

Failed if they scored 6 or less

Insufficient if they scored > 6 but less than 9 (9 included)

Good if they scored > 9 but less than 14 (14 included)

Excellent if they scored 15

Error if participants enter a negative number or a number outside the range supported (outside 0 - 15)

```
tasks=prompt('Write the number of tasks that you completed: ')

function resultado(){
    if (tasks <= 6 && tasks >= 0)
    console.log("**Failed**")
    else if (tasks > 6 && tasks <= 9)
    console.log("**Insufficient")
    else if (tasks > 9 && tasks <= 14)
    console.log("**Good**")
    else if (tasks == 15)
    console.log("**Excellent**")
    else if (tasks > 15 || tasks < 0)
    console.log("**Error**")
}

resultado();
```

Part 2

Open a repl.it Javascript page and call it Algorithms Introduction Exercise 2.

Write an algorithm to find the largest among 5 different numbers entered by the user.

Print out the largest number to the console.

```
num1 = parseInt(prompt("Escribe el número 1: "));
num2 = parseInt(prompt("Escribe el número 2: "));
num3 = parseInt(prompt("Escribe el número 3: "));
num4 = parseInt(prompt("Escribe el número 4: "));
num5 = parseInt(prompt("Escribe el número 5: "));

function compara(){
    if (num1 > num2 && num1 > num3 && num1 > num4 && num1 > num5)
    console.log("El número " + num1 + " es el mayor")
    if (num2 > num1 && num2 > num3 && num2 > num4 && num2 > num5)
    console.log("El número " + num2 + " es el mayor")
```

```
    if (num3 > num1 && num3 > num2 && num3 > num4 && num3 > num5)
    console.log("El número " + num3 + " es el mayor")
    if (num4 > num1 && num4 > num2 && num4 > num3 && num4 > num5)
    console.log("El número " + num4 + " es el mayor")
    if (num5 > num1 && num5 > num2 && num5 > num3 && num5 > num4)
    console.log("El número " + num5 + " es el mayor")
}

compara();
```

Part 3

Open a repl.it Javascript page and call it Algorithms Introduction Exercise 3.

We have 3 items and we know the price for each. However, we can only buy the two least expensive items.

Write an algorithm that takes in three user inputs and outputs the two smallest prices to the console.

```
cost1 = parseInt(prompt("Escribe el precio 1: "));
cost2 = parseInt(prompt("Escribe el precio 2: "));
cost3 = parseInt(prompt("Escribe el precio 3: "));

function costos(){
    if (cost1 > cost2 && cost1 > cost3)
    console.log("Los precios bajos son: " + cost2 + ", " + cost3)
    if (cost2 > cost1 && cost2 > cost3)
    console.log("Los precios bajos son: " + cost1 + ", " + cost3)
    if (cost3 > cost1 && cost3 > cost2)
    console.log("Los precios bajos son: " + cost1 + ", " + cost2)
}

costos();
```