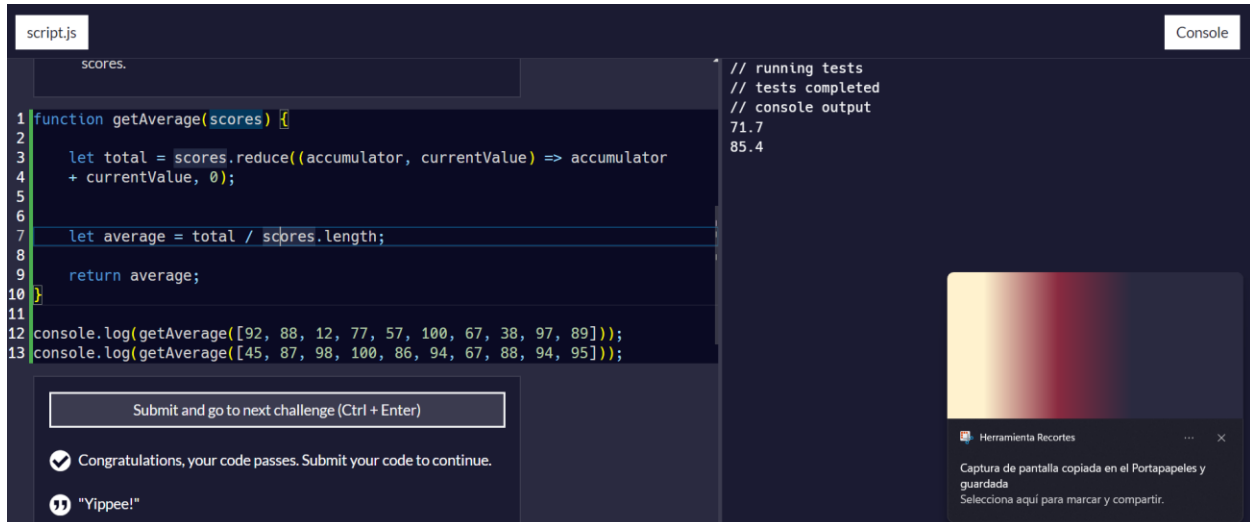


## Ejercicio 1

## Ejercicio 2

- Realice el siguiente ejercicio de la pagina web

freecodecamp: <https://www.freecodecamp.org/learn/javascript-algorithms-and-data-structures-v8/#review-js-fundamentals-by-building-a-gradebook-app>



The screenshot shows a code editor with a file named 'script.js'. The code defines a function `getAverage(scores)` that calculates the average of an array of scores using `reduce`. It then logs the results for two arrays of scores. The console on the right shows the output of the tests, indicating that the code passes. A 'Submit and go to next challenge' button is visible at the bottom.

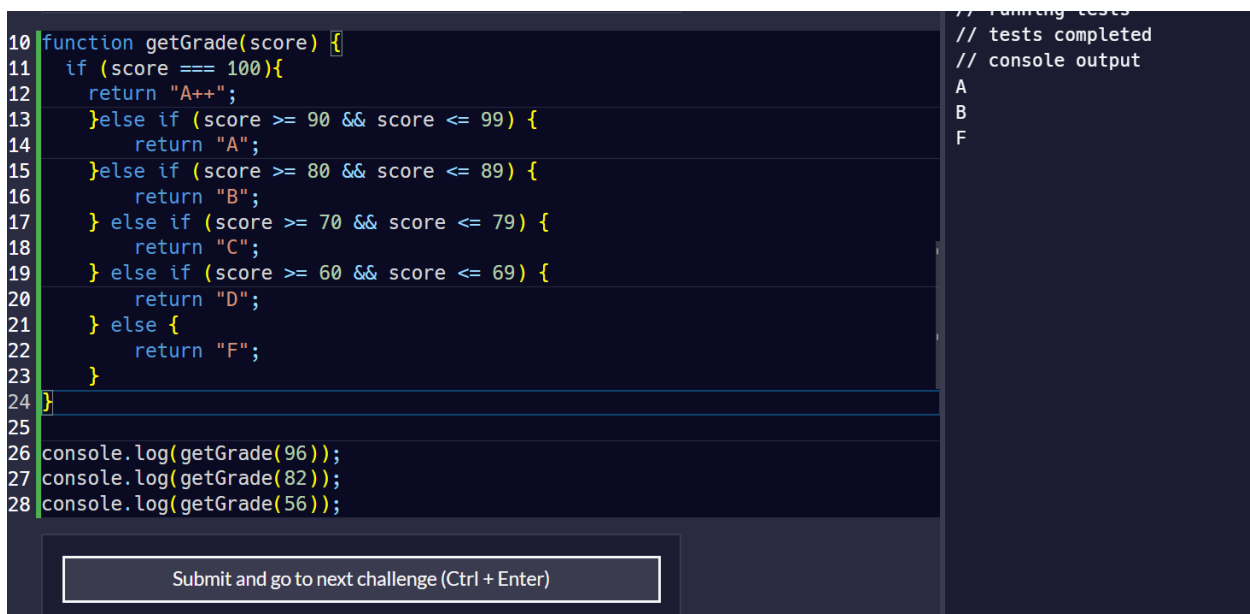
```
script.js
scores.

1 function getAverage(scores) {
2
3   let total = scores.reduce((accumulator, currentValue) => accumulator
4     + currentValue, 0);
5
6
7   let average = total / scores.length;
8
9   return average;
10 }
11
12 console.log(getAverage([92, 88, 12, 77, 57, 100, 67, 38, 97, 89]));
13 console.log(getAverage([45, 87, 98, 100, 86, 94, 67, 88, 94, 95]));

// running tests
// tests completed
// console output
71.7
85.4

Submit and go to next challenge (Ctrl + Enter)

✓ Congratulations, your code passes. Submit your code to continue.
🎉 "Yippee!"
```



The screenshot shows a code editor with a function `getGrade(score)` that returns a letter grade based on a score. The function uses a series of `if` and `else if` statements to determine the grade. The console on the right shows the output of the tests, indicating that the code passes. A 'Submit and go to next challenge' button is visible at the bottom.

```
10 function getGrade(score) {
11   if (score === 100){
12     return "A++";
13   }else if (score >= 90 && score <= 99) {
14     return "A";
15   }else if (score >= 80 && score <= 89) {
16     return "B";
17   } else if (score >= 70 && score <= 79) {
18     return "C";
19   } else if (score >= 60 && score <= 69) {
20     return "D";
21   } else {
22     return "F";
23   }
24 }
25
26 console.log(getGrade(96));
27 console.log(getGrade(82));
28 console.log(getGrade(56));

// running tests
// tests completed
// console output
A
B
F

Submit and go to next challenge (Ctrl + Enter)
```

- Use the `getGrade` function to get the student's grade. Then check if the grade is passing or not.

```
27 function hasPassingGrade(score) {
28   if (score >= 60) {
29     return true;
30   } else {
31     return false;
32   }
33 }
34
35
36 console.log(hasPassingGrade(100));
37 console.log(hasPassingGrade(53));
38 console.log(hasPassingGrade(87));
```

```
// Running tests
// tests completed
// console output
true
false
true
```

Submit and go to next challenge (Ctrl + Enter)

Congratulations, your code passes. Submit your code to continue.

- Use string concatenation (+) to build the message.
- Be careful with the punctuation and spaces in the message.

```
31 function studentMsg(totalScores, studentScore) {
32   let Average = getAverage(totalScores);
33   let studentGrade = getGrade(studentScore);
34
35   let message = "Class average: " + Average.toFixed(1) + ". Your grade: "
+ studentGrade + ".";
36
37   if (studentScore >= 60) {
38     message += " You passed the course.";
39   } else {
40     message += " You failed the course.";
41   }
42
43   return message;
44 }
45
46 console.log(studentMsg([92, 88, 12, 77, 57, 100, 67, 38, 97, 89], 37));
```

```
// Running tests
3. Your studentMsg function should return the correct message
based on the student's score and the class average.
// tests completed
// console output
Class average: 71.7. Your grade: F. You failed the course.
```

Ejercicio 3

Ejercicio 4

Ejercicio 5