

## **Taller de Javascript**

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## Taller

1.

### Rewrite the function using '?' or '||'

importance: 4

The following function returns `true` if the parameter `age` is greater than `18`.

Otherwise it asks for a confirmation and returns its result.

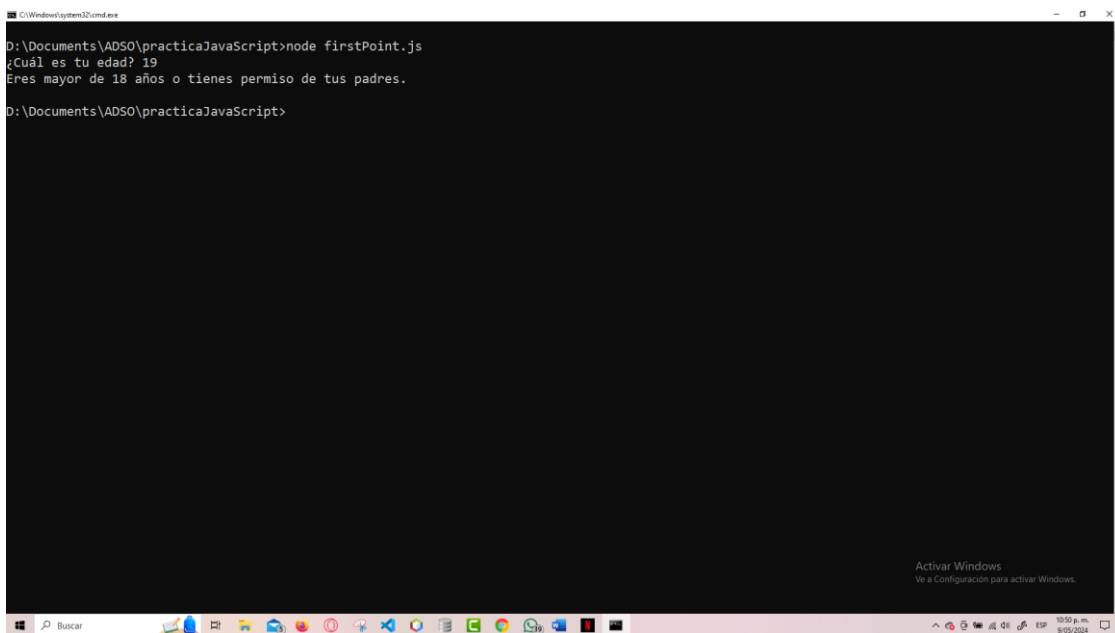
```
1 function checkAge(age) {  
2   if (age > 18) {  
3     return true;  
4   } else {  
5     return confirm('Did parents allow you?');  
6   }  
7 }
```

Rewrite it, to perform the same, but without `if`, in a single line.

Make two variants of `checkAge`:

1. Using a question mark operator `?`
2. Using OR `||`

R//:



```

C:\Windows\system32\cmd.exe

D:\Documents\ADSO\practicaJavaScript>node firstPoint.js
¿Cuál es tu edad? 19
Eres mayor de 18 años o tienes permiso de tus padres.

D:\Documents\ADSO\practicaJavaScript>
```

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2.

### Function min(a, b)

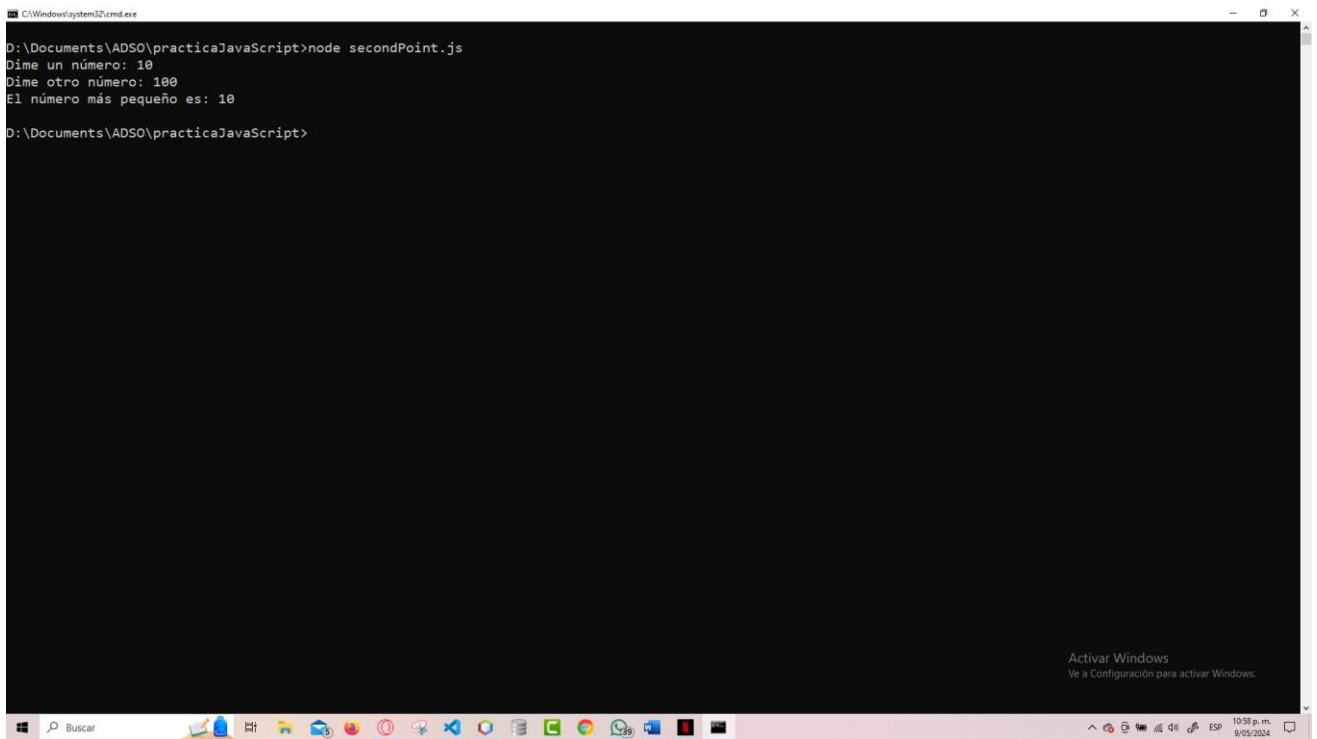
importance: 1

Write a function `min(a, b)` which returns the least of two numbers `a` and `b`.

For instance:

```
1 min(2, 5) == 2
2 min(3, -1) == -1
3 min(1, 1) == 1
```

R//:



```
C:\Windows\system32\cmd.exe
D:\Documents\ADSO\practicaJavaScript>node secondPoint.js
Dime un número: 10
Dime otro número: 100
El número más pequeño es: 10
D:\Documents\ADSO\practicaJavaScript>
```

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3.

## Function `pow(x,n)`

importance: 4

Write a function `pow(x,n)` that returns `x` in power `n`. Or, in other words, multiplies `x` by itself `n` times and returns the result.

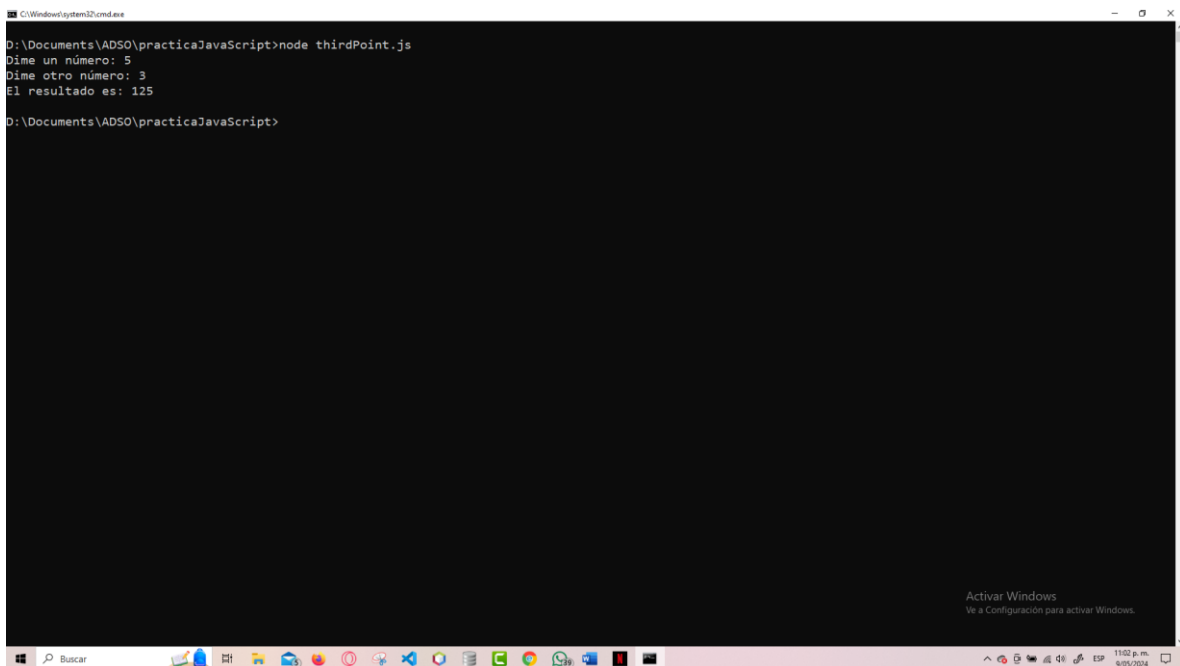
```
1 pow(3, 2) = 3 * 3 = 9
2 pow(3, 3) = 3 * 3 * 3 = 27
3 pow(1, 100) = 1 * 1 * ... * 1 = 1
```

Create a web-page that prompts for `x` and `n`, and then shows the result of `pow(x,n)`.

[Run the demo](#)

P.S. In this task the function should support only natural values of `n`: integers up from `1`.

R//:



```
C:\Windows\system32\cmd.exe
D:\Documents\ADSO\practicaJavaScript>node thirdPoint.js
Dime un número: 5
Dime otro número: 3
El resultado es: 125
D:\Documents\ADSO\practicaJavaScript>
```

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11:02 p.m.  
9/19/2024

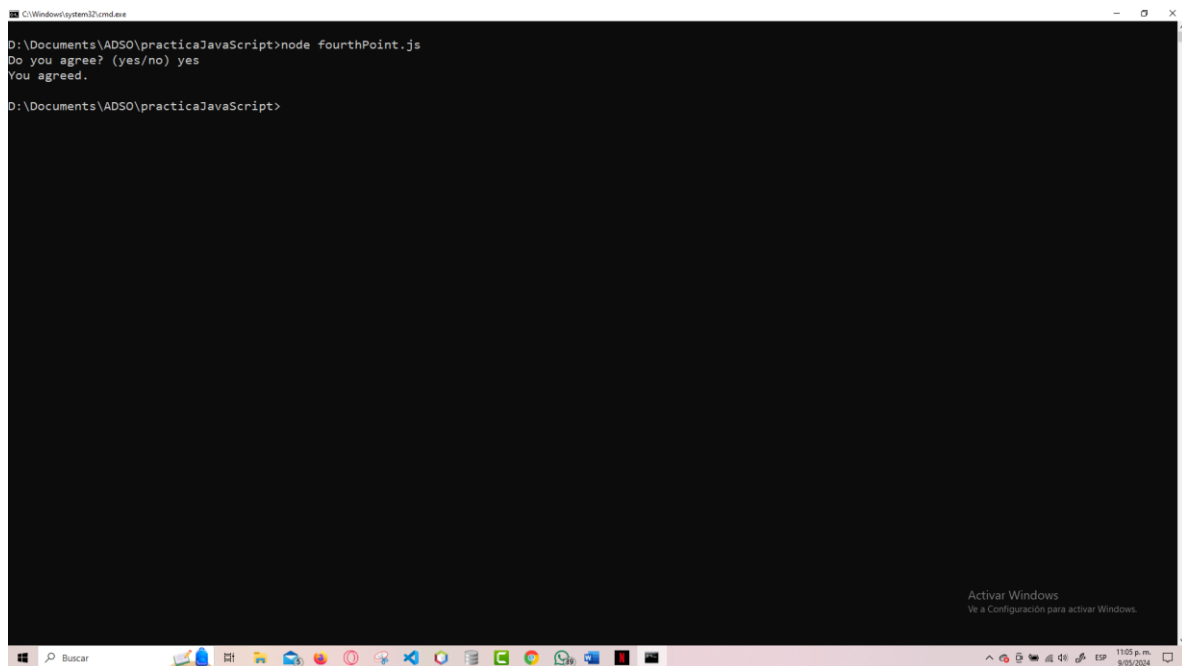
4.

## Rewrite with arrow functions

Replace Function Expressions with arrow functions in the code below:

```
1  function ask(question, yes, no) {  
2    if (confirm(question)) yes();  
3    else no();  
4  }  
5  
6  ask(  
7    "Do you agree?",  
8    function() { alert("You agreed."); },  
9    function() { alert("You canceled the execution."); }  
10 );
```

R//:



```
C:\Windows\system32\cmd.exe  
D:\Documents\ADSO\practicaJavaScript>node fourthPoint.js  
Do you agree? (yes/no) yes  
You agreed.  
D:\Documents\ADSO\practicaJavaScript>
```

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5.

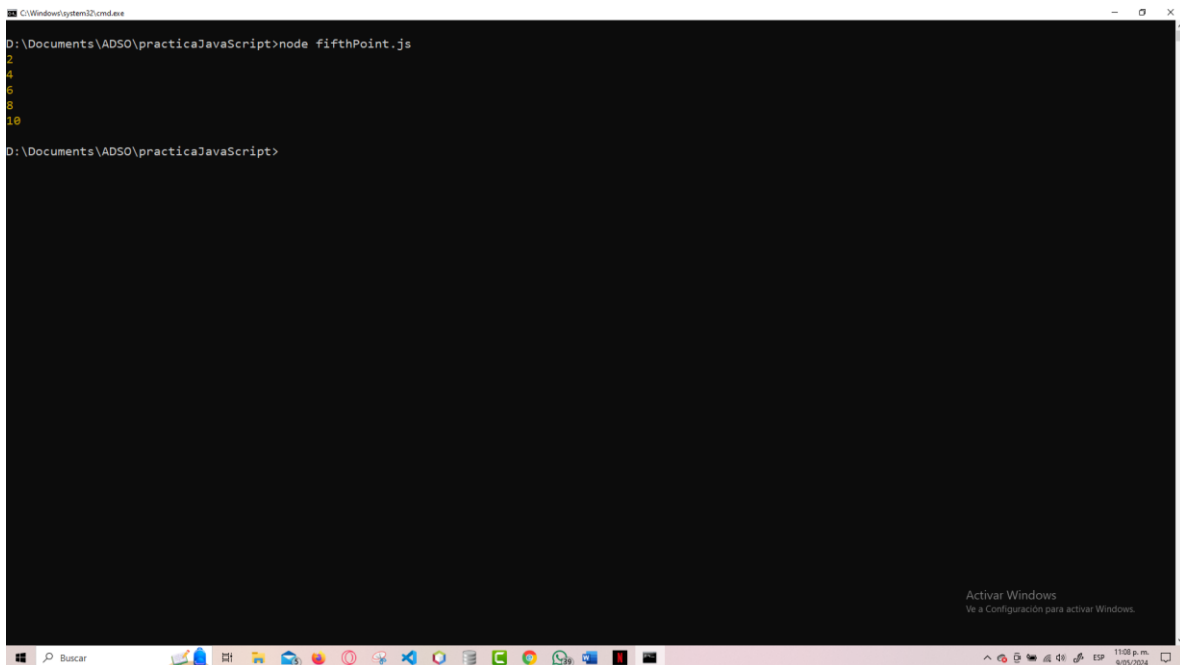
## Output even numbers in the loop

importance: 5

Use the `for` loop to output even numbers from `2` to `10`.

[Run the demo](#)

R//:



```
C:\Windows\system32\cmd.exe
D:\Documents\ADSO\practicaJavaScript>node fifthPoint.js
2
4
6
8
10
D:\Documents\ADSO\practicaJavaScript>
```

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6.

## Replace "for" with "while"

importance: 5

Rewrite the code changing the `for` loop to `while` without altering its behavior (the output should stay same).

```
1 for (let i = 0; i < 3; i++) {
2   alert( `number ${i}!` );
3 }
```

R//:

```
C:\Windows\system32\cmd.exe
D:\Documents\ADSO\practicaJavaScript>node sixthPoint.js
number 0!
number 1!
number 2!
D:\Documents\ADSO\practicaJavaScript>
```

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7.

### Repeat until the input is correct

importance: 5

Write a loop which prompts for a number greater than 100 . If the visitor enters another number – ask them to input again.

The loop must ask for a number until either the visitor enters a number greater than 100 or cancels the input/enters an empty line.

Here we can assume that the visitor only inputs numbers. There's no need to implement a special handling for a non-numeric input in this task.

R//:

```
C:\Windows\system32\cmd.exe
D:\Documents\ADSO\practicaJavaScript>node seventhPoin.js
Please enter a number greater than 100: 99
Enter a number greater than 100!
Please enter a number greater than 100: 100
Enter a number greater than 100!
Please enter a number greater than 100: 101
You entered a valid number greater than 100. Thank you!
D:\Documents\ADSO\practicaJavaScript>
```

8.

## Output prime numbers

importance: 3

An integer number greater than 1 is called a **prime** if it cannot be divided without a remainder by anything except 1 and itself.

In other words,  $n > 1$  is a prime if it can't be evenly divided by anything except 1 and  $n$ .

For example, 5 is a prime, because it cannot be divided without a remainder by 2, 3 and 4.

**Write the code which outputs prime numbers in the interval from 2 to  $n$ .**

For  $n = 10$  the result will be 2, 3, 5, 7.

P.S. The code should work for any  $n$ , not be hard-tuned for any fixed value.

R//:



```
C:\Windows\system32\cmd.exe
D:\Documents\ADSO\practicaJavaScript>node eighthPoint.js
Prime numbers up to 10:
2
3
5
7
D:\Documents\ADSO\practicaJavaScript>
```

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9.

## Rewrite the "switch" into an "if"

importance: 5

Write the code using `if..else` which would correspond to the following `switch` :

```
1  switch (browser) {
2    case 'Edge':
3      alert( "You've got the Edge!" );
4      break;
5
6    case 'Chrome':
7    case 'Firefox':
8    case 'Safari':
9    case 'Opera':
10     alert( 'Okay we support these browsers too' );
11     break;
12
13   default:
14     alert( 'We hope that this page looks ok!' );
15 }
```

R//:

```
C:\Windows\system32\cmd.exe
D:\Documents\ADSO\practicaJavaScript>node ninthPoint.js
Please enter your browser name: Opera
Okay we support these browsers too
D:\Documents\ADSO\practicaJavaScript>
```

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10.

### Rewrite "if" into "switch" [↗](#)

importance: 4

Rewrite the code below using a single `switch` statement:

```
1 let a = +prompt('a?', '');
2
3 if (a == 0) {
4   alert( 0 );
5 }
6 if (a == 1) {
7   alert( 1 );
8 }
9
10 if (a == 2 || a == 3) {
11   alert( '2,3' );
12 }
```

R//:

```
C:\Windows\system32\cmd.exe
D:\Documents\ADSO\practicaJavaScript>node tenthPoint.js
2,3
D:\Documents\ADSO\practicaJavaScript>
```

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Buscar

11:20 p.m.  
8/25/2024