

1. The following function returns true if the parameter age is greater than 18. Otherwise it asks for a confirmation and returns its result. Will the function work differently if else is removed?

```
function checkAge(age) {  
    if (age > 18) {  
        return true;  
    } else { // ...  
        return confirm('Did parents allow you?');  
    }  
}  
  
function checkAge(age) {  
    if (age > 18) {  
        return true;  
    } // ...  
    return confirm('Did parents allow you?');  
}
```

La función va a funcionar de igual manera, el else solo sirve para que el código se vea mas claro.

2. The following function returns true if the parameter age is greater than 18. Otherwise it asks for a confirmation and returns its result. Rewrite it, to perform the same, but without if, in a single line. Make two variants of checkAge:

1. Using a question mark operator ?

```
function checkAge(age) {  
    return (age > 18)? true : confirm('Did parents allow you?');  
}
```

2. Using OR ||

```
function checkAge(age) {  
    return age > 18 || confirm('Did parents allow you?');  
}
```

```
-----  
function checkAge(age) {  
    if (age > 18) {  
        return true;  
    } else {  
        return confirm('Did parents allow you?');  
    }  
}
```

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

```
function min(a,b){  
    if(a>b){  
        return `${a} es mayor que ${b}`;  
    }else{  
        return `${b} es mayor que ${a}` ;  
    }  
}
```

4. Rewrite the previous function as an expression function and as an arrow function

expression function

```
let min = function(a, b){  
  if (a>b) {  
    return `${a} es mayor que ${b}`;  
  }else{  
    return `${b} es mayor que ${a}`;  
  }  
};
```

arrow function

```
let a = 5;  
let b = 12;  
  
let min = (a>b) ?  
  (a, b) => console.log(`${a} es mayor que ${b}`) :  
  (a, b) => console.log(`${b} es mayor que ${a}`);  
  
min(a,b);
```

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

```
<!DOCTYPE html>  
<html>  
<head>  
  <title>Calculadora de Potencia</title>  
</head>  
<body>  
  <h1>Calculadora de Potencia</h1>  
  <script>  
  
    function pow(a, b) {  
      let resultado = 1;  
      for(i = 1; i<=b; i++){  
        resultado *= a;  
      }  
      return resultado;  
    }  
  
  </script>  
</body>  
</html>
```

```
    let base = prompt('Ingrese la base:');
    let potencia = prompt('Ingrese la potencia a lo que quieres
elevar: ');
    let resultado = pow(base, potencia);

    document.write('<p>' + base + ' elevado a la potencia de '
+ potencia + ' es igual a ' + resultado + '</p>');

</script>
</body>
</html>
```

6. Rewrite the pow(x,n) function as an expression function and assign 2^5 to a variable

```
let pow = function (a, b){
    let resultado = 1;
    for(i = 1; i<=b; i++){
        resultado *= a;
    }
    return resultado;
};

console.log(pow(2,5));
```

7. Rewrite the pow(x,n) function as an arrow function

```
let a = 2;
let b = 5;

let pow = (a, b) =>{
    let resultado = 1;
    for(i = 1; i<=b; i++){
        resultado *= a;
    }
    console.log(resultado);
}

pow(a,b);
```

8. Replace Function Expressions with arrow functions in the code below:

```
function ask(question, yes, no) {  
  if (confirm(question)) yes();  
  else no();  
}  
ask( "Do you agree?",  
  function() { alert("You agreed."); }  
  , function() { alert("You canceled the execution."); }  
);
```

```
let question = "Do you agree?";  
let yes = "You agreed."  
let no = "You canceled the execution";  
  
let ask = (question, yes, no) => {  
  confirm(question)? alert(yes) : alert(no);  
};  
ask(question, yes, no);
```

9. Write a function named calculateSupply that:

- a) takes 2 arguments: age, amount per day.
- b) calculates the amount consumed for rest of the life (based on a constant max age).
- c) outputs the result to the screen like so: "You will need NN to last you until the ripe old age of X"

Express it as an arrow function, if possible

```
let calcularSuministros = (age, cantidaPorDia) => {  
  const maxAge = 80;  
  let yearsRestantes = maxAge - age;  
  let cantidaTotalNecesitada = yearsRestantes * 365 * cantidaPorDia;  
  
  console.log(`Necesitaras ${cantidaTotalNecesitada} para durar hasta  
la vejez, con un maximo de ${maxAge} años`);  
}  
  
calcularSuministros(30, 2);
```