

1. What is the last value alerted by this code? Why?

```
let i = 3;
while (i) {
  alert( i-- );
}
```

El último mensaje será 1 porque el while comprueba la condición antes de entrar y en cuanto la variable i tenga el valor 0 ya no volverá a repetirse el bucle

2. For every loop iteration, write down which value it outputs

```
let i = 0;
while (++i < 5) alert( i ); // En este primer bucle i solo mostrará hasta 4 porque ++i
                             primero incrementa el valor y después lo comprueba
let i = 0;
while (i++ < 5) alert( i ); // En este bucle muestra hasta 5 ya que i++ primero muestra y
                             después incrementa
```

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

```
for (let i = 2; i <= 10; i++) {
  console.log(i);
}
```

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

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

```
let num = 0;
while (num < 3) {
  console.log(num);
  num++;
}
```

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.

```
let num = 0;
do{
    num = Number(prompt("Introduce un numero mayor a 100: "));
    if(num == ""){
        num = 101;
    }
}while(num <= 100);
```

6. An integer number greater than 1 is called a prime if it cannot be divided without a remainder by anything except 1 and itself. Write the code which outputs prime numbers in the interval from 2 to n. P.S. The code should work for any n, not be hard-tuned for any fixed value.

```
let num = 23
let array = [];
for(let i = 0; i<num; i++){
    if(num%2 == 0){
        array.push(i);
    }
}

if(array.length > 2){
    console.log(`El numero ${num} no es primo`);
}else{
    console.log(`El numero ${num} es primo`);
}
```