Day 5

While loops in JavaScript:

What is a while Loop?

A while loop in JavaScript is used to run a block of code repeatedly as long as a given condition is true. If the condition becomes false, the loop stops running.

Syntax

while (condition) {

   // code to execute repeatedly

}

Part	Meaning
condition	The loop keeps running as long as this condition is true
code block	The statements inside {} run each time before checking the condition again

Example: using while loop prints number from 0 to n-1

```
> let n = prompt("Enter the value of n: ");
  n = Number.parseInt(n);
  let i = 0;
  while (i<n) {
      console.log(i);
      i++;
  }

  0

  1

  2
```

Example: to print from 0 to n

```
10    let n = 3;
11    let i = 0
12    while (i<=n) {
13        console.log(i);
14        i++;
15    }
```

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```
PS E:\JavaScript\Day1-10\Day5> node main.js
0
1
2
3
```

While loops in JavaScript:

What is a do...while Loop?

A do...while loop is a type of loop that executes the code block at least once, and then repeats it as long as the given condition is true.

Note: The main difference from a while loop is that: do...while checks the condition after running the code once.

Syntax

do {

*   // code to execute*

} while (condition);

Example: printing 0 to n-1

```
17    //Do while loop
18    //Program to print from 0 to n-1 using do while loop
19    let n = 3;
20    let i = 0;
21    do {
22        console.log(i);
23        i++
24    } while (i<n);
```

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```
PS E:\JavaScript\Day1-10\Day5> node main.js
0
1
2
```

Example: printing 0 to n

```
17    //Do while loop
18    //Program to print from 0 to n using do while loop
19    let n = 3;
20    let i = 0;
21  ∨ do {
22        console.log(i);
23        i++
24    } while (i<=n);
```

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```
● PS E:\JavaScript\Day1-10\Day5> node main.js
  0
  1
  2
  3
```

Example: here the condition doesn't meet, so ran at least for once.

```
26    //Do while loop to show that it runs atleast once
27    let n = 4;
28    let i = 10;
29  ∨ do {
30        console.log(i);
31        i++
32    } while (i<n);
```

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```
● PS E:\JavaScript\Day1-10\Day5> node main.js
  10
```

--The End--