**4. Control Flow**

**Conditional statement**:

In JavaScript we have two type of Conditional Statement

1. if-else
2. switch-case

**if-else**:

The if statement executes a statement if a specified condition is truthy. If the condition is falsy, another statement can be executed.

**Example**:

function testNum(a) {

if (a > 0) {

return "positive";

} else {

return "NOT positive";

}

}

console.log(testNum(-5));*//"NOT positive"*

**switch-case**:

The switch statement evaluates an expression, matching the expression's value to a case clause, and executes statements associated with that case, as well as statements in cases that follow the matching case.

**Example**:

var expr = "java";

switch (expr) {

case "java":

console.log("Programming Language");

break;

case "HTML":

console.log("Markup Language");

break;

case "javascript":

console.log("scripting language");

*// expected output: "Mangoes and papayas are $2.79 a pound."*

break;

default:

console.log("None of the above");

}

*//output is "Programming Language"*

**Loop**:

Loops offer a quick and easy way to do something repeatedly. There are many different kinds of loops, but they all essentially do the same thing: they repeat an action some number of times.

The statements for loops provided in JavaScript are

1. for loop
2. while loop
3. do...while loop
4. labeled loop
5. break loop
6. continue loop
7. for...in loop
8. for...of loop

**for loop**:

A for loop repeats until a specified condition evaluates to false. The JavaScript for loop is similar to the Java and C for loop.

for ([initialExpression]; [condition]; [incrementExpression]){

statement;

}

**Example**:

for (let i = 1; i <= 5; i++) {

console.log(i);

}

*/\**

*1*

*2*

*3*

*4*

*5*

*\*/*

**while loop**:

A while statement executes its statements as long as a specified condition evaluates to true. A while statement looks as follows:

while (condition) {

statement;

}

**Example**:

let i = 5;

while (i >= 1) {

console.log(i);

i--;

}

*/\**

*5*

*4*

*3*

*2*

*1*

*\*/*

**do-while loop**:

The do-while loop is always executed once before the condition is checked (and then again until the while condition returns false). A do...while statement looks as follows:

do {

statement;

}

while (condition);

**Example:**

let i = 1;

do {

console.log(i);

i++;

} while (i <= 5);

*/\**

*1*

*2*

*3*

*4*

*5*

*\*/*

4. Control Flow