### **1. Basic if-else**

**Question:** Write a function checkNumber that takes a number as an argument and prints "Positive" if the number is greater than 0, "Negative" if the number is less than 0, and "Zero" if the number is 0.

javascript

Copy code

function checkNumber(*num*) {

if (num > 0) {

console.log("Positive");

} else if (num < 0) {

console.log("Negative");

} else {

console.log("Zero");

}

}

### **2. If-else with Multiple Conditions**

**Question:** Write a function gradeCalculator that takes a score between 0 and 100 and prints the corresponding grade based on the following criteria:

* "A" for scores 90 and above
* "B" for scores between 80 and 89
* "C" for scores between 70 and 79
* "D" for scores between 60 and 69
* "F" for scores below 60

javascript

Copy code

function gradeCalculator(score) {

// Your code here

}

function gradeCalculator(*score*) {

if (score >= 90) {

console.log("A");

} else if (score >= 80) {

console.log("B");

} else if (score >= 70) {

console.log("C");

} else if (score >= 60) {

console.log("D");

} else {

console.log("F");

}

}

### **3. Basic For Loop**

**Question:** Write a function printNumbers that prints all numbers from 1 to 10 using a for loop.

javascript

Copy code

function printNumbers() {

// Your code here

}

function printNumbers() {

for (let i = 1; i <= 10; i++) {

console.log(i);

}

}

printNumbers();

### **4. For Loop with If-else**

**Question:** Write a function evenOddPrinter that prints "Even" for even numbers and "Odd" for odd numbers between 1 and 10 using a for loop and if-else statements.

javascript

Copy code

function evenOddPrinter() {

// Your code here

}

function evenOddPrinter() {

for (let i = 1; i <= 10; i++)

if (i % 2 === 0) {

console.log("Even");

} else {

console.log("Odd");

}

}

evenOddPrinter();

### **5. Nested For Loop**

**Question:** Write a function multiplicationTable that prints a multiplication table for numbers 1 through 5. The table should look like this:

Copy code

1 2 3 4 5

2 4 6 8 10

3 6 9 12 15

4 8 12 16 20

5 10 15 20 25

javascript

Copy code

function multiplicationTable() {

// Your code here

}

function multiplicationTable() {

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

let row = " ";

for (j = 1; j <= 5; j++) {

row += i \* j + " ";

}

console.log(row.trim());

}

}

multiplicationTable();

### **6. Sum of Numbers with For Loop**

**Question:** Write a function sumNumbers that calculates the sum of all numbers from 1 to 100 using a for loop.

javascript

Copy code

function sumNumbers() {

// Your code here

}

function sumNumbers() {

let sum = 0;

for (i = 1; i <= 100; i++) {

sum += i;

}

return sum;

}

console.log(sumNumbers());

### **7. Factorial Calculation**

**Question:** Write a function factorial that takes a positive integer n and returns the factorial of that number. (e.g., factorial of 5 is 5 \* 4 \* 3 \* 2 \* 1)

javascript

Copy code

function factorial(n) {

// Your code here

}

function factorial(*n*) {

let result = 1;

for (i = 1; i <= n; i++) {

result \*= i;

}

return result;

}

console.log(factorial(3));