Lab Practice -2 [404184C] : ELECTIVE-III(C) - JavaScript							
ACADEMIC YEAR: 2024-25							
CLASS	: BE	DIV	: 5	Batch	: R5	DATE	: / /24
Roll No	42218	ABC ID	: 711-218-285-772			SEMESTER	: I

Experiment No.: 10

Code:

1. Experiment10.js:

```
// Roll No: 42218
// Name: Sarvesh Deshpande
// Batch: R5

// Importing prompt-sync for taking input from the user
const prompt = require('prompt-sync')();

// Function to print multiplication table using a for loop
function forLoopTable(num) {
    console.log(`Multiplication Table of ${num} (using For loop):`);
    for (let i = 1; i <= 10; i++) {
        console.log(`${num} x ${i} = ${num * i}`);
    }
}

// Function to print multiplication table using a while loop
function whileLoopTable(num) {
    console.log(`\nMultiplication Table of ${num} (using While loop):`);
    let i = 1;
    while (i <= 10) {
        console.log(`${num} x ${i} = ${num * i}`);
        i++;
    }
}

// Function to print multiplication table using a do-while loop
function doWhileLoopTable(num) {
    console.log(`\nMultiplication Table of ${num} (using Do-While loop):`);
    let i = 1;
    do {
        console.log(`${num} x ${i} = ${num * i}`);
        i++;
    } while (i <= 10);
```

```
}

// Prompt user for a number
let number = prompt("Enter a number to print its multiplication table: ");

// Validate input to ensure it's a number
if (!isNaN(number) && number.trim() !== "") {
    number = parseInt(number);
    forLoopTable(number);
    whileLoopTable(number);
    doWhileLoopTable(number);
} else {
    console.log("Please enter a valid number.");
}
```

Output:

```
PS D:\PICT\BE\SEM7\JS\Lab> node "d:\PICT\BE\SEM7\JS\Lab\Exp10\exp10.js"
Enter a number to print its multiplication table: 4
Multiplication Table of 4 (using For loop):
4 x 1 = 4
4 x 2 = 8
4 x 3 = 12
4 x 4 = 16
4 x 5 = 20
4 x 6 = 24
4 x 7 = 28
4 x 8 = 32
4 x 9 = 36
4 x 10 = 40

Multiplication Table of 4 (using While loop):
4 x 1 = 4
4 x 2 = 8
4 x 3 = 12
4 x 4 = 16
4 x 5 = 20
4 x 6 = 24
4 x 7 = 28
4 x 8 = 32
4 x 9 = 36
4 x 10 = 40

Multiplication Table of 4 (using Do-While loop):
4 x 1 = 4
4 x 2 = 8
4 x 3 = 12
4 x 4 = 16
4 x 5 = 20
4 x 6 = 24
4 x 7 = 28
4 x 8 = 32
4 x 9 = 36
4 x 10 = 40
PS D:\PICT\BE\SEM7\JS\Lab>
```

Date: Course Teacher Sign