On my 19th day at Surfboard Payments internship, I focused on learning important JavaScript concepts, including variables and data types, operators, control structures, and functions. These fundamental concepts are essential for writing and understanding JavaScript code. While I was able to grasp the theoretical aspects, I faced challenges when trying to write a simple JavaScript program and explain the code in Visual Studio Code. Despite my struggles, I gained valuable knowledge and improved my understanding of JavaScript.

I started the day by learning about variables and data types. Variables are used to store values, and JavaScript allows different types of data, including numbers, strings, booleans, arrays, and objects. Understanding how variables work is important because they allow us to manipulate and store information in a program. I learned how to declare variables using "var," "let," and "const," and how different data types impact the way variables behave.

Next, I learned about operators, which are used to perform operations on variables and values. There are four main types of operators: arithmetic, assignment, comparison, and logical operators. Arithmetic operators include addition, subtraction, multiplication, and division. Assignment operators are used to assign values to variables. Comparison operators help compare values, such as checking if two numbers are equal. Logical operators are used to make decisions in code by combining multiple conditions. Understanding these operators is crucial for performing calculations and making decisions in JavaScript.

After learning about operators, I moved on to control structures, which are used to control the flow of a program. These include conditional statements like "if," "else," and "switch," as well as loops like "for," "while," and "do-while." Control structures allow programs to execute different blocks of code based on certain conditions. For example, an "if" statement can check if a number is positive or negative and execute different code accordingly. Loops, on the other hand, allow us to execute a block of code multiple times, which is useful for tasks like iterating through arrays.

The last major topic I learned was functions. Functions are blocks of reusable code that perform specific tasks. They help make code more organized and reduce repetition. I learned how to declare functions using the "function" keyword and how to call functions to execute them. Functions can take parameters, which allow us to pass values into them, and they can also return values, making them useful for performing calculations or processing data.

Although I understood these concepts, I struggled to apply them when writing code in Visual Studio Code. I attempted to write simple JavaScript programs using variables, operators, control structures, and functions, but I encountered errors and was unable to get the expected output. Debugging my code was challenging, as I had difficulty identifying where I went wrong. Despite these struggles, I kept trying different approaches and learned from my mistakes.

Even though I was unable to complete the assigned task successfully, I gained valuable experience and a better understanding of JavaScript fundamentals. I realized that learning programming is not just about understanding concepts but also about practicing and troubleshooting errors. I plan to continue working on my JavaScript skills and improving my ability to write and explain code. The knowledge I gained today will help me in future tasks, and I am determined to overcome my challenges and become better at

JavaScript programming.