**WDD221  
Week 6 Lab**

**Answer the following questions:**1. What does the throw keyword do?

* The **throw keyword** is used to raise an exception.

2. What is the difference between a TypeError and ReferenceError?

- **TypeError** represents an error when the code cannot run whereas **ReferenceError** represents an error when a variable doesn’t exist or hasn’t been initialized.

3. Provide a brief summary as to your approach to debugging JavaScript code.

- I’ll use week 6’s Guided Activity & Extra Credit assignment for this question. I was working on this assignment and ran into an error while I was debugging it in the console tab– “ Uncaught SyntaxError: "" string literal contains an unescaped line break” and it told me there was a syntax error. In this case, I had double quotation marks around a variable instead of singular quotes. Additionally, there were additional syntax and logical errors that I had to fix and incorporate into the appropriate files. There are times when I have no idea how to approach an error and I try to look at examples and work from there. Or if it comes to it, I’ll look it up.

4. Has the debugging process helped you with your JavaScript assignments?

- **Yes**

5. Share some specific examples of how debugging has helped you become a more proficient coder.

- This is more of a general example, but my first coding class I took was programming logic and problem solving in Visual Studio, and I had no idea what I was getting myself into. It was a lot of trial and error. I understood the basics, but applying it got tricky. As the course when on, I learned to troubleshoot and test as I go. Understanding the code logic was tricky, but it has helped me visualize and understand the terms and functions.

- As I took more classes I understood program flow, optimizing performance, looking out for errors, and most importantly, learning from my mistakes.

- Additionally, when I was learning how to code and was running into errors, debugging helped me understand the language

- I have always underestimated the phrase “Practice makes perfect” – because nothing is perfect so how does practice help with that? I know now that the more you do something, the better you become at it – maybe proficiency but mistakes come with it too.

6. Fix the broken code, provide comment(s) as to what was wrong with the original code:

for (let i=0; i < 5; i++) { // the condition in this loop should be i < 5

    console.log(i)  
}

function addIfEven(num) {

    if(num % 2 == 0) // the equality operator should be ‘==’ or ‘===’ instead of ‘=’  
{  
    return num + 5  
 }

} // added extra curly brace for syntax

function loopToFive() {

    for(let i=0; i < 5; i++) // added semi colons and the for loop should be i < 5 instead of i < 5, i++  
 {  
  console.log(i)  
}

} // added extra curly brace for syntax