Assignment 2 Experience

Implementing the hangman game in both Python and Java was a valuable experience in comparing two different programming languages. Python felt more concise and readable overall. The syntax was straightforward, and fewer lines of code were required to implement the same logic. Features such as dynamic typing and built-in data structures made development intuitive. Java, on the other hand, required more structure and explicit type declarations, which initially made it feel more verbose. However, once the overall structure was established, the logic became clear and organized. Both implementations were readable, but Python required less boilerplate code, resulting in a shorter program (113 lines in Python compared to 182 lines in Java).

In terms of testing and debugging, Python felt slightly easier due to is simpler syntax and fewer structural requirements. Errors were generally quicker to identify and correct. Java required more careful handling of types, input parsing, and exceptions, which added a small amount of complexity. However, the difference was not significant, as both languages provided clear feedback during debugging. Regarding development speed, Java benefited from having a clearly defined structure, which made it easier to organize the program once the initial framework was set up. Python allowed for faster implementation of specific features due to its concise syntax. Overall, both languages were effective for this assignment, but Python required fewer lines of code while Java emphasized stronger structural clarity.

Programming Languages	Development Speed	Ease of Testing and Debugging	Code Readability	# lines of code
Python	5	5	5	113
Java	4	4	4	182