A reflection where you consider whether testing or inspection identified more bugs in this case. State why you think one way worked better than the other. How could you improve the technique that worked less well?

Answer: In this assignment, testing generally involves debugging the codes with specific input and observing the output. We might get a run-time error or logical problems, but in inspection, if I read the code manually, I can analyze the code and might find a bug. In this case, inspection worked because if I inspected the code thoroughly, I could catch structural and logical problems, but testing was less effective because the code was running properly and testing couldn’t reveal issues like buffer overflow. In my inspection, it can be improved by adding more comments beside the code. I have seen that this code has not stated many comments. In testing, it can be improved by different types of testing. In conclusion, I will say that to identify more bugs, we have to run tests on the code; it might give us a runtime error. After getting an error, we can inspect it and fix the bugs easily. So, we have to do both of them together.

Did you find it difficult to find the bugs in this assignment? If not, what helped find them quickly? If you did find it difficult, what made finding the bugs so difficult?

Answer: Yes, I found some bugs in this assignment; however, finding those bugs was not too difficult for me because I have some knowledge about coding as I finished Introduction to Programming Language last semester. But finding those bugs was not easy either. I faced some challenges while inspecting and fixing the code because code with bugs needs sharp eyes to find those bugs. This was simple, small code, but when the code looks small and simple, it can hide small bugs. Smaller issues need a closer look and time to be found. However, in this case, finding the bugs will be difficult because of insufficient testing and a lack of comments. Common code errors that lead to bugs were recognized during the inspection, such as out-of-boundary memories and fixed-size buffers.