**Questions:**

1. **Now that you know about pointers and classes, indicate two ways they could have been used to improve the implementation of any of the previous game projects or the Joe’s Hotdogs problems?**

One: In the Joe’s Hotdogs problem, classes could be used to simplify the code. A CustomerOrder class could be used to save the number of hotdogs, fries, etc the customer wants as members. Methods such as showOrder, caculateCost etc could have allowed to simplify the program into different files. Moreover, the class’s members and methods could easily be used to access the order or total cost, etc anywhere in the program by referencing the object alone. There would not have been a need to call by reference specific variables such as subtotal each time a function was called, which I had to do in my previous implementations.

Moreover, using pointers, entire vectors or arrays could easily be referenced and returned from functions. I had had trouble accessing the order and other vectors outside or inside a function and pointers would have allowed that to be easier. In some of my game projects, at some point in my code, I create a new array to copy some values from another array but for that, I fix the size of a new array. Using pointers and dynamic memory allocation, I could have avoided memory wastage by only assigning as much memory as needed. For example, in the Fibonnaci series or isPalindrome codes.

1. **What was the most satisfying part of this week’s assignment (problem set or game project)?**

The game project was oddly satisfying because in the beginning of planning, I spent a couple hours to simply think how I would implement this game. Even then, when I started writing, the first few hours almost made me hopeless because I was unable to initialize and divide a unique deck of cards among the players.

I took help from last week’s card code and took me a while before I got this part running. But once past this, I was able to slowly but successfully develop all the modules – in fact I really enjoyed when I was able to create functions such as showCard, drawCard once and then call them throughout the function. The reusability aspect that functions and methods are so famous for became very obvious in this project and I really found it helpful to be able to do that.

Finally, I feel that the fact the game project proved to be more challenging to me made it more satisfying because it took a lot of pre-planning and understanding how different modules will and should interact before I was able to finally implement the code.