For this assignment, like the semantic checker, implementing struct access and manipulation was the most challenging part. This is due in part to the fact that it is difficult to see the change in the operand stack, so I had to do it by hand many times using the --r command in the command line. My issue was that my assign statement was structured in a way that when a new struct was made, SETF was called both in visit_new_rvalue and visit_assign_stmt. I fixed it by completely restructuring my assign_stmt function so that it knew if the variable being assigned was a field or not.

My first sample program defines a function that computes the factorial of an input; within main we print the contents, we also print the fibonacci sequence to show that for-loops work properly, additionally I print a cool pattern in the console.

My second sample program defines two structs and prints their contents to show that structs work properly. Following this, the program prompts the user to enter their name and age using the input() keyword then converts the input into an int and prints how old the user will be in 10 years.