PA4 Report

Directions:

The input file is input.txt which is included in the source folder. All you have to type is:

• make

• ./csem < input.txt

The problem was to generate a list of intermediate language quadruples on its standard input.

First I had to go through my cgram.y file to understand how the grammar is working and how it is calling the function from sem.c file. The cc.h had the id_entry and sem_rec struct defined. So I had to go through those to identify what properties are there for establishing the links of nodes. I also had to go through the sym.c and semutil.c file where important functions for example – merge(), node(), lookup(), install() was defined.

While writing the codes in sem.c, I traced the grammar, saw the “not implemented” statements and tried to figure out how the function can be implemented to match the expected output. I first tried working input1 and input2. The functions with backpatching was most challenging. After discussing with TA and classmates I figured it out, I think. Keeping track of Branch and Labels and establishing the link was challenging also.

For debugging and testing the solutions I got a gradescript from my classmate and that helped me a lot