Cse2421   **Lab 5 Assignment**   November 2, 2017.

Project Name: Simple Y86-64 Code   Due date: Thursday, November 9, 2017.

Your task is to write program Simple.ys in Y86-64 assembly language that could be compilation of the following C code:

```
long add(long , long *,  long, long *);
long x=100, y=200, sum;
long main()
 {
    long z, w;
    z=-30;
    w=50;
    sum=add(x,&y,z,&w);
    return w;
 }
long add(long a, long *b, long c, long *d)
 {
    int t = a+*b-c-*d;
    return t;
 }
```

Your Y86 code should have the init function besides main and add functions, and you should follow the convections for data transfers on function calls.

You should _appropriately_ comment your assembly code, meaning that your comments have to be primarily in terms of C variables.

First compile your Simple.ys using command: yas Simple.ys

Once you do not have compilation errors, run your code using any of simulators. Check, i.e. make sure, that your program works correctly. You should be able to understand contents of registers and memory.

Submissions:
a. your source code in file Simple.ys using command:
            submit c2421ac lab5 Simple.ys
b. a hard copy of your Simple.yo file and the output of command "_yis Simple.yo_", with explanations for contents of displayed registers and memory locations.