CSCI 2330 – x86-64 Functions Exercises

1. Write a snippet of x86-64 assembly that implements the following C function. Don't use **push** or **pop** instructions; instead, work with **%rsp** directly. Assume that an **int** is 4 bytes and that **foo** is some function that takes two **int *** arguments and returns an **int**. The **leaq** instruction will be useful here.

```
int cfun() {
    int x = 3;
    int y = 7;
    int z = foo(&x, &y); // note: could modify x or y
    return x + z;
}
```

2. Write a C function `print_dims` that, when passed a string of the form "*w*x*l*x*h*", e.g., "5x6x7", prints the following output:

```
width = 5
length = 6
height = 7
```

Use one or more calls to `sscanf` and `printf`.