CS 120 Fall 2019 Study Quiz #4

1. There is a function named **`fred`** that takes 2 parameters and returns an integer. The types of the two parameters (in order) are `int`, and `float`. Write the function *prototype* (declaration) for **`fred`**.

2. Write a *definition* for a function named `TriangleArea`. This function will calculate the area of a triangle from the triangle's base and height. The formula for the area of a triangle is:

$$\frac{1}{2}bh$$

The function takes 2 float parameters (the base and the height) and returns a float. Use meaningful identifiers in your code. In other words, don't use single-letter or abbreviated variable names. You don't have to write comments.

3. Given a file called **`foo.c`**, what is the `gcc` command to compile the file and create the corresponding object file named **`bar.o`**? You should include all of the command switches that are used to enable the maximum warnings that we've been using. (Hint: there are at least 4 of them) The command should **not** link the object file.

4. The program on the right will compile (with the appropriate command line we use in CS120). There are 2 warnings that the compiler will emit. What are they? You don't have to have the exact wording, but you must be able to briefly describe what the warnings are. Also, the `add` function is not in `stdio.h`.

```
#include <stdio.h>

int main(void)
{
  printf("%f", add(1.0F, 2.0F));
  return 0;
}
```

5. Specify in order the sequence of function calls made by the program on the right. Note that I'm not asking for the output, just the functions that are called (**and their arguments**) and the order in which they are called. Don't forget to include `main` and `printf` in the sequence.

```
#include<stdio.h>

void Displayworld(void)
{
  printf("world\n");
}

void Displayhello(void)
{
  printf("hello ");
  Displayworld();
}

int main(void)
{
  Displayhello();
  Displayworld();
  return 0;
}
```