# General Statement

You must write this assignment starting with **Basic template.py.**

Everything in the template is laid out for you to put the right things in the right place. Leave every comment as it is, from the **# Program <program name>** line to the **# End Program** line (you don’t need the template description section above it).

Everything in angle brackets is a placeholder that needs to be changed.

**# Program <program name>** becomes **# Program combat**

**# <what the program does>** becomes **# creates game characters**

**# Date: <today’s date>** becomes **# Date: 21 September 2020**

You will add a line for <revision date> every new date that you work on the program.

Do not leave the angle bracket. It’s **combat**, not **< combat >.**

# The Problem

We’re going to build a simple combat game.

# Understand the Problem

## The Task

A warrior is defined as a set of characteristics: strength, energy, and speed. A field is defined as two locations, a place for each warrior. In this first level game, the locations are just numbers. You will define two warriors and move them around, displaying where they are and what the game state is (the values of all the warrior characteristics and the field locations.

## Specifics

Change all the placeholders to be your name, program name, what the program does, and the date.

Declare three variables for the strength, energy, and speed of two warriors. The names begin with red\_ or blue\_ for the two warriors, so they are red\_strength, red\_energy, and so forth. The two variables for the field are field\_red and field\_blue. Declare all eight variables by assigning them the value 0. Declare another variable, time, to be 0 also.

Next, assign each variable it’s setup value. The red values are strength 45, energy 100, and speed 5. The blue values are 80, 150, and 3, respectively. The two location variables and time also start at 0.

To play the game, do this *seven* times:

* print the time, then print all values for each warrior in this format:

Time is 0

Red strength is 45, energy is 100, speed is 3, location is 0.

Blue strength is 80, energy is 150, speed is 5, location is 0.

* add one to time
* add the speed of each warrior to its location
* subtract the square of each warrior’s speed from its energy
* subtract twice the warrior’s speed from its strength

That is,

print, add, add, subtract, subtract

print, add, add, subtract, subtract

print, add, add, subtract, subtract

print, add, add, subtract, subtract

print, add, add, subtract, subtract

print, add, add, subtract, subtract

print, add, add, subtract, subtract

Finally, print “Whew.”

## Special Notes:

1. **Do not use** decisions, loops, functions, lists, or files, *even if you know how to do those things*.
2. The purpose of this assignment is to see if you have the skills to use **only** the Python tools described in chapters 1-2 to solve this problem.
3. Using more advanced features demonstrates that you don’t know the simpler tools well enough, so using them will **lower** your score.
4. You earn up to 60% by correct operation and up to 40% with good style, readability, and documentation.

Submit (in **Blackboard**) the file **combat.py**.

*Name the file* ***exactly*** *as given*. **Do not add anything to the program name**. **Not** your name, **not** your ID number, **not** words like “assignment 2” or “revised”, or **any** additional characters as part of the file name.

The **Python** program is scored with a maximum value of **100** **points**.