

Create a project called “Lab6”. Inside it, create a class called “Warrior” (*without* a *main* method) and a class called “Driver” that has a *main* method in it. Below is a description of the features of the Warrior class. As you add features to the Warrior class, put code into the *main* method of the Driver that tests the new Warrior features.

The Warrior class should have the following features:

1. Three instance variables:
 - a *String* variable called *name*
 - an *int* variable called *strength*
 - an *int* variable called *healthLevel*
2. A constructor that accepts three parameters (*String*, *int*, *int*) and sets the instance variables to these values.
3. A constructor that accepts one parameter (*String*) that sets the *name* to the parameter, sets *strength* to 10, and sets *healthLevel* to 200.
4. An instance method called *isAlive* that takes no parameters and returns true if the current object has a positive *healthLevel* and false otherwise.
5. An instance method called *smite* that takes one parameter of type *Warrior*. The current object will “smite” the parameter, which means the parameter’s *healthLevel* will be decreased by the *strength* of the current object.
6. An equals method. In order for two Warriors to be considered equal, they must have the same name and strength. (Do *not* compare their *healthLevels*.)
7. A *toString* method. This should return a *String* in the following format:

Conan the Barbarian - Strength: 24, Health: 400

8. A *static* method called *fight*. This method takes two parameters of type *Warrior*, and returns a *Warrior*. The two Warriors will take turns smiting one another until one of them is dead. (The first parameter gets to strike first!) The method will return a reference to the winner. (Note: You should never allow a Warrior who has died to still “smite” the other one!)
9. A *static* method called *tournament*. This method takes four parameters of type *Warrior*, and returns a *Warrior*. The first and second parameters will fight. Then the third and fourth parameters will fight. Finally, the winners of those two fights will fight against each other. The method returns a reference to the winner of this last fight.