Homework #19 Objects. Continued.

Note:

Please, run your code before submitting. If you get an error, try to fix it before submitting your homework. If you get help from anyone, please, make sure that you actually understand the solution.

To solve task 5, copy the code for the class Hero from the classwork code, and create a Hero object.

Tasks:

1. Create a class Monster with four attributes: unique ID, health points (HP), power, and level. The ID, HP, and power should be an argument passed by the user. The initial level is always 1.

2. Add a basic intro method for the monster, which should look something like this: "Monster 101, 6 hp, 4 power, and level 1."

3. Add two class attributes: (1) time, which is a string that can be either "day" or "night", and (2) bonus, which is an integer that can be either -1 or 2.

This is a bonus to the monster power: -1 during the day and +2 during night. Start with initial values: time = "day" and bonus = -1.

Add a simple instance method which adds the value of the bonus to the power of the monster

4. Implement a class method (not to be confused with an instance method) to change the time to either "day" or "night". The method should accept a string argument from the user, "day" or "night" AND update both class attributes from task 3, time and bonus (the value depends on whether it is day or night as described above).

5. Implement an instance method that adjusts the level of the monster on the basis of the level of the hero and difficulty level. Therefore, there are two arguments: an integer value which is the level of the hero and a string that can be either "easy", "normal", or "hard". The level of the monster is equal to the level of the hero. It is further adjusted given the difficulty. For "easy" it decreases by 2, for "hard" it increases by 2 (and no change for "normal" difficulty").