CS 101 Homework 3-6-22

- *Save your code as lastname_homework.py and submit on Google Classroom.*
- *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.*

We continue working with the class code (as always, the classwork is posted on Google Classroom if you need to download it).

Task 1

Expand the class code by creating two types of swords: a magic sword and a soldier sword (that is, each kind of a sword should be a new SUBCLASS). Each magic sword should have a unique (read: an instance attribute) 'intellect requirement' (an integer). The intellect requirement should be a RANDOM number generated when an object is created (that is, inside def __init__).

Similar to the above, each soldier sword should have a unique 'strength requirement' attribute. Once again, the attribute should be a random value generated at the time of the object creation.

Finally, magic swords have an elemental affinity, which is a string value: "fire", "water", or "ice".

Task 2

Update the display method for both swords to display information about the intellect/strength requirements and the elemental affinity (for magic swords only).

Task 3

Assume that a magic sword is two times more expensive than a regular sword. For example, a regular sword that is "rare" and has condition = 80 is worth 80 * 2 = 160. A magic sword that is also "rare" and has 80 condition is worth 80 * 2 * 2 = 320. How do you incorporate this into you code? (Note: there are many different approaches to do this, and I will leave it up to you to decide which approach to adopt).

Task 4

Create an inventory, in which there are four different swords (two magic and two soldier). Display their information. Assume that their condition decreased by 80%. Update the swords' values. Display their information again to confirm that their values decreased.