Homework #21 Objects. Final.

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.

Continue the code from classwork for this assignment. Don't break down the class for different questions. Keep it as a unit.

Tasks:

1. Create two inventory child classes (or subclasses) of the class "Item" from the classwork: "sword" and "shield".

   Each subclass has a unique class attribute:

- base_attack = 10 for swords,

- base_defense = 8 for shields.

2. Implement instance methods for "sword" and "shield" classes, which calculate the actual attack value (for swords) and actual defense value (for shields), using the formulas:

For swords:

Actual attack = base attack * rarity coefficient * (Condition/100).

For shields:

Actual defense = base defense * (rarity coefficient + 1) * (Condition/50).

3. For both subclasses, create instance methods intro() that displays the rarity, condition, and actual attack/defense values of the items.

Create a list called hero inventory, and place there two swords and two shields. Use random number generator to generate the initial conditions and rarity. Display information about each item in the inventory using the intro() methods.

4. Assume that there was long battle and the conditions of one of the swords and one of the shields decreased by 50%. Use the previously created methods to re-calculate:

   (a) the monetary value of the items, and

   (b) actual attack/defense values for the items.

   Again, display all information about each item in the inventory.