Project 2

Using the python methods we've learned so far, create a game that can be played by the user. Make sure to utilize things we've learned in class like **functions**, **lists**, and **dictionaries** as needed to make your code simple and elegant.

Simple battle game:

- (10 points) Create a dict or list of 4 characters that a user can choose to play. These characters should have *at least* a **name, age, class** (as in mage, wizard, rogue...whatever), and then a **"special power" dictionary** that has *at least* the name of the power, the range of attack points it can have, and how many turns the player has to wait to use it again (aka, cooldown). The dictionary object should look like this, but with your values: **{'sp_name':'blahblahblah', 'range': [6,12], 'cooldown': 4}**
- (5 points) Let the user choose which character to play, and print a message telling them their name, age, class, and a STRING that describes their special power.
- (5 points) Randomly choose one of the remaining characters using the random package from python. Tell them who their opponent is
- (3 points) Add an entry to the dictionary that gives the player 100 health points
- (2 points) For each turn, Ask the user whether they want to do a basic attack or use their special power
- (18 points) Create a function called **player_turn()** that takes the attacker dictionary, and the attackee dictionary, and an argument **attack_special** that is either *True* or *False* as arguments
- (7 points) Inside this function, if the player uses their special attack, check that it is not on "cooldown" (aka they haven't used it in the past *n* turns where *n* is the cooldown value from their special character dictionary)
- (5 points) If they want to use their special power and they're allowed to, use the python random package to choose the number of damage points this attack does using the range of damage from their special power dict.
- (3 points) If they don't want to or cannot use their special attack, then just have them do a regular attack that has a range of [0,6]
- (2 points) Print a message that says they've done x amount of damage this round, and subtract that number of health points from the attackee and print the current health of the player to the screen.
- (10 points) Repeat this process (the above 4 points) for the player they're playing against, but randomly choose whether to do special or regular attacks using python's random package (hint: random.randint(0,1) or random.choice(["special","normal"]))
- (10 points) If at **any** point either players health is < 0, that person loses, and the other wins! Create a function called **check_health()** that takes a players dictionary as an argument and checks if their health is too low, if it is, choose a random string message (something like "oh no, you're dead" from a list you previously defined that

has 6 options of death messages as strings, and print that string to the screen. (If your player wins, print “you win”) Then end the game.

- **EXTRA CREDIT (3 points):** Create a pet character that helps the character your player chooses by attacking the enemy with a regular attack with range[0,2] but every 10 turns (a turn is player A goes and then player B goes), print a message that your pet has gotten an energy boost and does either 10 points damage to the opponent **OR** 4 points of healing to you, use the python package random to choose. You can use/modify the player_turn() function to apply this damage.

Note: the python package *random* might help: https://docs.python.org/2/library/random.html