

Lab 5.0

Random and Modules

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Goals

The goal of this lab is to practice using Python 3. Specifically, you will practice:

- Modules

Instructions

Work is due by Friday midnight and must be submitted to Brightspace in the proper place. Unless otherwise instructed, submissions must be python files (e.g. files that end with `.py`). Any other format, even if it is plain text, will **not** be graded. Messy or otherwise unreadable code will lose points. Lab submissions can be all in the same file, but please label with comments to which task code belongs. **IMPORTANT:** Any code that is commented out will not be graded. **RUN YOUR CODE TO MAKE SURE IT WORKS!!!**

Task 1 - Create Your Own Module

This lab focuses on creating and importing custom modules. The goal of this exercise is to practice using Python modules and to get experience creating and using your own modules. Modules allow you to break code into multiple files.

In this lab you will create a *gamehelper* module. The purpose of the *gamehelper* module is to provide several helper functions to randomly generate a comical video game weapon. If you don't get to the end, that is fine. Have fun with it.

- Create a new python file called: *gamehelper.py*. This is your new module which you will import into your lab code. The *gamehelper* module will itself need to import the random module.
- In the *gamehelper.py* file, create a CONSTANT tuple of strings. Each string is a weapon type (e.g. axe, pencil, bow, shoe, etc.).
- Write a function to randomly select one weapon type from the list created in part B. HINT: The choice function in the random module can help with this.
- Write a function to randomly generate two numbers (bounds are up to you). These numbers are the min and max damage of the weapon. Make sure you assign the lesser number to the min and higher to the max. If they are equal, it doesn't matter which is which. The function should return the two numbers in a tuple.
- Create a second tuple of strings similar to the first one. Each string in this tuple is an adjective.
- Write a function that returns a random adjective to describe the weapon. This list could include: Dwarven, Wobbly, Toasted, Marshmallow, etc. This should be printed in front of the weapon type.

G Lastly, bring it all together. Import the *gamehelper* module into another python file: lab5.py. Use the functions in the module to create a random weapon and print it nicely.

Here are several examples:

```
NAME: Hello Kitty Dagger  
MIN/MAX DAMAGE: 5-9
```

Another example:

```
NAME: Squirrel-bone Crossbow  
MIN/MAX DAMAGE: 1-3
```