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Exercises

Below will be a series of simple exercises for you to do after completeing the corresponding workbook. Complete all exercises in the same Python file as you optimise your code as you learn more Python as the day progresses.

Notebook 1-01_Variables Exercise

Well done on completeing your first notebook, where you learnt about variables, for now all you need to do is create a variable called hero_name and assign it the value of None.

Notebook 1-02_Numbers Exercise

We now know about number types in Python, so lets improve upon the previous exercise with our new found knowledge. Heroes are always adventuring and getting into all kinds of dangerous situations. Create a varaible called health and assign it an integer value of 100.

Notebook 1-03_Strings Exercise

Strings are down, its time to revisit our code and finally update our hero_name variable with an actual name. Everyone knows a hero has to have a cool name, choose wisely there is a prize for the hero with the coolest name.

Lets start ramping up the difficulty of these exercises, in addition to giving our hero a name, lets write a nice introduction to an adventure game, make sure to format it nicely using the skills you learnt in this notebook.

Notebook 1-04_Lists Exercise

Time to show off your new Python list skills, create a list called inventory and add some useful items that your hero might need.

Notebook 1-05_Dictionaries Exercise

The life of an adventurer is pretty interesting, but only if you move around, create a dictionary called places and in this dictionary make some keys for different places and a description of these places for the values.

If you want to challenge yourself make a nested dictionary where you have a region and inside that region you have numerous places.

Notebook 1-07_1-08 Booleans and if Statements

Finally using your knowledge of Booleans and control flow, have a way of enabling your explorer to move around the different places.

To control the user you will need to interact with the program, and the only way we know how at the moment is text input, so think about how you can achieve this.

Don't forget when that when working with user input, the input will always be a string, as we have not gotten around to error checking and testing yet, try to make your inputs as simple and error prone as possible for the meantime.

Bonus Exercise

So now with all those individual components you should be able to put them together and make your own text based adventure game program. You may need to refactor your code a little bit, but you have all the tools necessary to make a complete game.

Your imagination is the limit, just think about all the things you can do, with the data structures and data types you have learnt.