

Inventory Assignment

Python Features Required: Basic python, print, user defined functions, dictionaries

File(s) to Submit: inventory.py

Specification:

You are creating a fantasy video game and will need a data structure to model a player's inventory. You will use a dictionary where the keys are string values describing the item in the inventory and the value is an integer value specifying how many of that item the player has.

For example, the dictionary value

```
{ 'rope':1, 'torch':6, 'gold coin':42, 'dagger':1, 'arrow':12 }
```

means the player has 1 rope, 6 torches, 42 gold coins, and so on.

In the file inventory.py, you are to write the code for the two functions described below.

1. `displayInventory(inventory)`, where the `inventory` parameter is a dictionary representing the player's inventory and displays it like the following:

```
Inventory:
12 arrow
42 gold coin
1 rope
6 torch
1 dagger
Total number of items: 62
```

Hint: You can use a for loop to loop through all the keys in a dictionary, or through all the items in the dictionary.

List to Dictionary Function for Fantasy Game Inventory

2. `addToInventory(inventory, addedItems)`, where the `inventory` parameter is a dictionary representing the player's inventory and the `addedItems` parameter is a list of newly acquired loot.

The `addToInventory()` function should return a dictionary that represents the updated inventory. Note that the `addedItems` list can contain multiples of the same item.

Execution of the code

```
inv = {'gold coin': 42, 'rope': 1}
dragonLoot = ['gold coin', 'dagger', 'gold coin', 'gold coin',
              'ruby']
inv = addToInventory(inv, dragonLoot)
displayInventory(inv)
```

should produce the output

```
Inventory:
45 gold coin
1 rope
1 ruby
1 dagger
Total number of items: 48
```