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CSE-20

28 Nov. 2021

README: Protein Tracker

Class Documentation:

The Class that was created is called ProteinBag. This class models the real-world object which is a protein bag. The class acts like a normal protein bag; it can be bought and stored, it can be taken from, it can be added to (no one actually does this but it's not impossible), and the scoops can be tracked.

The class variable "protein_g" has a value of 24. This value represents the amount of protein in each scoop, in grams. Most proteins have about 24g of protein per scoop.

The date variable "self.__x" holds the value of the name of the bag of protein that the user would like to take from.

The data variable "self.__protein_in_scoops" holds the value amount of protein in the scoops that the user is taking.

The method "__init__" initializes the class ProteinBag. It takes one argument, the dictionary which holds the protein bag brand name as a key, and the scoops inside of the bag as values. This method does not return anything.

The method "set_scoops" sets the number of scoops inside the bags of protein. It does not require any argument. This method does not return anything.

The method "get_scoops" returns the name of the bags and the number of scoops left in each bag. This method does not require any arguments.

The method “get_totalscoops_left” sums the number of scoops and returns the total. This method does not require any arguments.

The method “take_scoop” subtracts the user-specified number of scoops from a certain bag. This method requires the name of the protein bag and the number of scoops that are going to be taken from the specified bag. This method returns the amount of protein in the scoops taken.

The method “add_scoop” adds a specified number of scoops to a specific protein bag. This method requires two arguments; the name of the protein bag and the number of scoops that are going to be added to the specific bag. This method does not return anything.

The method “get_protein_grams” returns the amount of protein inside of the scoops taken. This method does not require arguments.

Demo Program Documentation:

When the program is run, a shell is created. The user will be able to enter commands and input specific information, depending on the command entered. The user will be able to add one or several protein bags and the number of scoops inside of each bag, add to protein bags, take from protein bags, get the total amount of scoops left, get the total amount of scoops left in each bag, get some help, and exit the program.

To use the program, the user just enters commands to access different methods. Before the user wants to take or add to bags, the user needs to add a list of protein bags because the user cannot add or take from bags if there are no bags available. The user can do this by first using the command “add list,” this will allow the user to enter an initial inventory. Also, as previously stated, the user can add a list of protein bags (and the number of scoops in each bag), can add scoops to certain bags, take scoops from certain bags, know the total amount of scoops left in all

of the bags, know the total number of scoops in each bag, get reminded of the commands using “help”, and can exit the program. This program will help keep track of the number of scoops left in each bag.