Github Repository: https://github.com/huangalexis/custom-class

Class Documentation:

Description of the class:

The real-world objects my class is based on are drinks. You can customize the price, flavor, brand, container type, and size of your drink. You can also customize whether or not your drink is alcoholic, how much you want to add, and calculate the alcohol content. With the __str__ method, you can see an overview of your customized drink.

Description of each of the class and data variables:

Public variables:

- self.brandname: The brand of your drink. For example: Lipton, Coca-Cola, Pepsi, etc.
- self.flavor: The flavor of your drink. For example: Lemon, Cherry, Vanilla, etc.
- self.container: The container your drink is stored in. Can only be can or bottle.
- self.amount_oz: The size of your drink in ounces.

Private variables:

- self.__alcoholic: Whether or not your drink is alcoholic. Can either be True or False.
- self.__alcoholcontent: The percentage of alcohol in the total drink (Original amount plus however much you add).
- self.__price: The price of your drink.

Description of each of the methods:

- __init__(self, brandname=None, flavor=None, container='can', amount_oz=0): Initializes the object. Does not return anything.
- setdrink(self): Set method to customize the brand, flavor, and size (in ounces) of your drink. When typing this function into the main function, no inputs are needed, since you will be asked for answers when the program is run. For ounces, please enter a number.
- setprice(self, price): Set method to set the price of your drink. Place your price as an input when typing this into the main function.
- getprice(self): Get method to return the price of your drink. No inputs are necessary. Returns a string that tells you the price.
- switchcontainer(self): Method to swap the type of container. No inputs are necessary. If you had a can, then it switches to bottle, and if you had a bottle, then it switches to can. The default container is can.

- addalcohol(self): Method to set self.__alcoholic to True or False. No inputs are necessary, since you will be asked for answers when the program is run. If you are under 21, returns a string and sets self.__alcoholic to False. If you are over 21 and do not want to add alcohol, sets self.__alcoholic to False. If you are over 21 and want to add alcohol, sets self.__alcoholic to True, asks for how much you want to add, and calculates/changes alcohol content.
- getalcoholic(self): Get method to see if drink is alcoholic. No inputs necessary. If self.__alcoholic = True, returns string saying drink is alcoholic. If self.__alcoholic = False, returns string saying drink is not alcoholic.
- __str__(self): Method to print a description for the drink. No inputs necessary. Returns a string that describes the drink; brand, flavor, original container amount and type, whether or not it is alcoholic, the alcohol content (0% if non alcoholic), and the price.

Demo Program Documentation

Description of the demo program:

My demo program runs all of the methods within the main class. In my program, you customize a drink, and a description of your drink's brand, flavor, size, alcohol content, and price is displayed. The program can also switch the container that your drink is contained in and add alcohol to the drink.

Instructions on how to run the demo program:

To run the demo program, set the price of your drink by changing the input for yourdrink.setprice(). Then run the program and give example answers to the questions asked. If you can't think of a brand/flavor, cherry cola would be a good choice. I love cherry coke!!!