

PYTHON PROGRAMMING

Homework 2 - Due April 6th at 10:00 AM

Submit the homework to this address: sureshsigera@gmail.com

1. Make sure to submit the "CVS self-checkout" program that you build in-class.

Requirements the for submission

- Write your algorithm first
- Use a reasonable amount of comments explain your code
- To receive the full credit, upload your code to the GitHub

Program functionality

During the self-checkout;

- The user can have many items (s)
- The user can remove an item(s)
- The user might have a discount coupon
- The program should calculate the New York tax
- The program should print the "CVS Receipt"

Write the Python code (Pick any five you like)

1. Write a program that counts up the number of vowels contained in the string `s`. Valid vowels are: 'a', 'e', 'i', 'o', and 'u'.
For example, if `s = 'azcbobobegghakl'`, your program should print:
Number of vowels: 5
2. Write a program that prints the number of times the string 'bob' occurs in `s`. For example, if `s = 'azcbobobegghakl'`, then your program should print Number of times bob occurs is: 2
Ask the user to input a string and then reversal the given input.
Input: "Programming in Python"
Output: nohtyP ni gnimmargorP
3. Write a program that accepts a sentence and calculate the number of uppercase letters and lowercase letters. Suppose the following input is supplied to the program.
4. Input: Hello World
Output: UPPERCASE: 1, LOWERCASE: 9
5. Write a program that accepts a comma-separated sequence of words as input and prints the words in a comma-separated sequence after sorting them alphabetically. Suppose the following input is supplied to the program: without, hello, bag, world
Then, the output should be: bag, hello, without, world
Ask the user to enter a string, and check if it is a palindrome. If yes, print True, or else print False.
6. Write a program which will find all such numbers which are divisible by 7 but are not a multiple of 5, between 2000 and 3200 (both included). The numbers obtained should be printed in a comma-separated sequence on a single line.