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#Program #3

#Section 0003

#Created on October 30th, 2021

#Due October 31st, 2021 11:59PM

<div align="center">Program #3 Algorithm</div>

1. Start.

2. have checker set to -1

3. while checker is -1 repeat the following

    3.1 use the menu() function

        3.11 the menu() function outputs 3 options labled: 1- Print Transaction ID and user name, 2- Print user name , total before and total after discount, and 3- Quit

    3.2 have checker2 set to -1

    3.3 while checker2 is -1 repeat the following

        3.31 Ask for the user to input a choice from the options given.

        3.32 If the user entered 1 then use the functions choice1_output() and file() in conjunction.

            3.321 the file() function firsts sets the checker within the function to -1

            3.322 while checker within the file() function is -1 repeat the following

                3.3221 the program will try the following

                    A. ask the user to input a filename or file location

                    B. open the file and read it

                    C. seperate the file into multiple lists from each line

<div align="center">1</div>

D. set the checker within the file() function to 0

E. Output that it is reading the data.

3.3222 if the program is unable to open the file to avoid an IOError it will:

A. Output that the "filename was incorrect"

B. set the checker within file() function to -1

3.323 the file() function will return the lists it created

3.32A the choice1_output() function will then use the lists from the file() function

3.32A1 The choice1_ouput() function will then output ID, FirstName, and LastName.

3.32A2 The lists from the file() function will be iterated and split into smaller lists labled y

3.32A3 from these lists the the function will output y[0], y[1], and y[2].

3.32B have checker2 set to 0

3.32C have checker set to the cont() function then using the cont() function

3.32C1 checker wihtin the cont() function is set to -1

3.32C2 while the checker within the cont() function is -1 repeat the following

3.32C21 Ask the user if they would want to contniue or quit.

3.32C22 If they input 'Y' or 'y'

A. set checker within cont() to 0

B. return -1

3.32C23 if they input 'N' or 'n'

A. output "Have a great day"

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B.set checker withint cont() to 0

C. return 0

3.32C24 if they input anything else

A. output that it is an "Invalid input"

3.33 if the input was 2 then use the choice2_output() and file() functions in conjunction

3.331 the file() function firsts sets the checker within the function to -1

3.332 while checker within the file() function is -1 repeat the following

3.3321 the program will try the following

A. ask the user to input a filename or file location

B. open the file and read it

C. seperate the file into multiple lists from each line

D. set the checker within the file() function to 0

E. Output that it is reading the data.

3.3322 if the program is unable to open the file to avoid an IOError it will:

A. Output that the "filename was incorrect"

B. Set the checker within file() function to -1

3.333 the file() function will return the lists it created

3.33A the choice2_output() function will then use the lists from the file() function

3.33A1 The choice1_ouput() function will then output ID, FirstName, LastName, Before, and After.

3.33A2 The lists from the file() function will be iterated and split into smaller lists labled y

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3.33A3 An empty listx will be created

3.33A4 iterate over the y lists and append the iterations to the iterations to the empty listx

3.33A5 have z set to the float of the last index of listx

3.33A6 have z1 set to z-z*(40/100) rounding 2 places

3.33A7 output y[0], y[1], y[2], y[-1], and z1

3.33B have checker2 set to 0

3.33C have checker set to the cont() function then using the cont() function

3.33C1 checker wihtin the cont() function is set to -1

3.33C2 while the checker within the cont() function is -1 repeat the following

3.33C21 Ask the user if they would want to contniue or quit.

3.33C22 If they input 'Y' or 'y'

A. set checker within cont() to 0

B. return -1

3.33C23 if they input 'N' or 'n'

A. output "Have a great day"

B.set checker withint cont() to 0

C. return 0

3.33C24 if they input anything else

A. output that it is an "Invalid input"

3.34 if user input was 3

3.34A set checker to 0

3.34B set checker2 to 0

3.34C output "Have a great day"

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3.35 if the user inputs anything else

      3.35A output "Enter a Valid option"

4. end