CSE 232 Systems Programming

2020 Spring

Assignment 3

Due date: 11.05.2020, 23:45

Purpose of This Assignment:

Purpose of this assignment is to teach you about shell scripts with if and loop structures.

Your script should check whether the two files "Monoprix" and "Aldi" exist. If Either one of them does not exist or one of them is empty, your script should abort with an appropriate error message. Also, your script should check whether the number of lines in these files are equal. Assume each line in file "Monoprix" contain product name with its price (a decimal number) at Monoprix market, and each line in "Aldi" contain product name with its price (a decimal number) at Aldi market. If the number of entries (lines) in both files do not match; write to compare.txt file which file has missing entries, and how many.

After that fill the missing entries (you can write any product name with its price) till the number of lines in both files become equal to each other. Lastly, use command line argument to provide both Monoprix file and Aldi file while you run your script. Then, find the sum of elements in both Monoprix file and Aldi file and check whether the sum value is odd or even then write the result to odd_even file as follow:

"The sum of products in Monoprix market is equal to sum result and it is (odd or even based on your result)"

"The sum of products in Aldi market is equal to sum result and it is (odd or even based on your result)"

Note: during sum and odd/even calculations you need to use shift command to process the files.

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SUBMISSION Submit your .sh file as your assignment with the name "nameLastNameID_assignment3.sh" using COADSYS.

Output example

Monoprix.txt	Aldi.txt
Tomato 4 pence	Tomato 6 pence
Orange juice 10 pence	Orange juice 5 pence
Sandwich 12 pence	
Onion 3 pence	

Compare.txt output is

File Aldi.txt has missing 2 entries

Monoprix.txt	Aldi.txt
Tomato 4 pence	Tomato 6 pence
Orange juice 10 pence	Orange juice 5 pence
Sandwich 12 pence	Sandwich 10 pence
Onion 3 pence	Onion 2 pence

odd_even.txt output

Monoprix market products sum is 29 pence and its odd

Aldi market product sum is 23 pence and its odd

You can get useful information about, shift commands and how you can read from file in the Following sites:

https://linuxize.com/post/how-to-read-a-file-line-by-line-in-bash/

https://fresh2refresh.com/unix-tutorial/advanced-unix-commands/shift-command-unix/