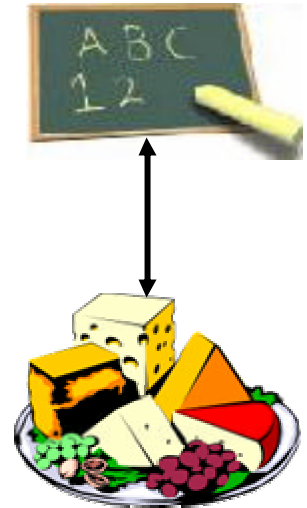


Straightforward Problems



Search and Replace

One of the great strengths of computers is that when provided with an explicit set of instructions, they can repeat them flawlessly and in many cases far faster than any human. This makes them very well suited for searching and sorting data. In this exercise you are going to write a very simple search and replace program. The program should be able to scan in up to 1k of text from the standard input and replace every instance of the word "cheez" with "chalk" and visa versa and then output it to the standard output. Create a test file and use redirection to analyse your results.



Hints

1. Break the problem down into three logical steps, inputting the data, replacing the words and then outputting the data.
2. Think of the problem in terms of arrays; how would you replace every instance of 'cheez' with 'chalk' in a long character array.

Extensions

1. Try to alter the program so it switches "cheese" and "chalk".
2. Expand the program to handle any amount of user-inputted data, (you may need to change your algorithm to do this).
3. Add a feature that will allow the user to specify what words are replaced. Think about how you would further alter the program so it could accept a list of words and their replacements.