

Question 1: Why we close a file after use?

Answer:

To save our data stored on file. Also this process makes our program fast and reliable.

-- or --

You have finished with it. This is particularly important if you are writing to the file. The operating system does not switch on the disk drive to write just a single character to the disk, rather it waits until it has a load to write and then writes the lots in one go.

Question 2: Write a C/C++ program which defines an array of 10 elements.

Answer:

This program should ask a number from the user and search this number in the array if the number exists in the array, it should display the location of the number otherwise display the message The number is not in the given array.

Question 3: Write a C/C++ program which defines an array of 15 elements and fill the array with string "12players2teams". This program should display that how many digits and alphabets the string "12players2teams" contains using Character handling functions.

Question 4: What principle does this illustrate?

Question 5: What the Pumping lemma II says about $\text{length}(x) + \text{length}(y)$ must be:

Question 6: When asked to give a recursive definition for the language PALINDROM over the alphabet $S = \{a, b\}$, a student wrote:

Answer:

Rule 1 a and b are in PALINDROM.

Rule 2 If x is in PALINDROM, then so are AxA and BxB

Unfortunately all the words in the language defined above have an odd length and so it is not all of PALINDROM. Fix this problem.

Give a recursive definition for the language EVENPALINDROM of all palindromes of even length

Question 7: Write a regular expression of the language having strings that either start or end with "00" and have no more zeroes. Where the alphabet is $\{0, 1\}$.