

Exercises about recursion

Exercise 1:

Write a recursive function that extracts the maximum value from a vector of integers, where the vector and the vector size are given as parameters.

Exercise 2:

Write a recursive function that computes x to the power of y (i.e. x^y), where x and y are given as parameters.

Exercise 3:

Write a recursive function that verify if a string (i.e. an array of chars) is palindrome. The parameter to this function is the string.

Exercise 4:

Write a recursive function that executes a binary search over an array of integers. Assume that the value to be searched, the array and its size are given as parameters.

Exercise 5:

Write a recursive function that generates a Fibonacci sequence with n elements, where n is given as parameter.

Exercise 6:

Study and implement the Quick Sort sorting algorithm.