

CS211

Rearrange 'em

Write a function

Let k be an array of n distinct integers

void p(int k[], int n)

that will do the following:

1. Find the “middle” element (the element at position $n/2$) of array k . Call its value m .
2. Rearrange the elements of array k so that all of the elements of k that are smaller than m will be moved to the positions before m , and all elements of k which are greater than m will occupy the positions to the right of m .

Important Note: the element m might no longer be in the middle position after function p does its work.

Test the function

Write a main program to test the function p for arrays of sizes 5,10,15,20. Fill the arrays with random values using the `rand()` function.

For each trial, print out the array both before rearranging by calling function p , and after.