

Câu hỏi 2

Chính xác

Chấm điểm của 2,00

Implement static method selectionSort in class **Sorting** to sort an array in ascending order. After each selection, we will print out a list to check (using printArray).

```
#include <iostream>
using namespace std;

template <class T>
class Sorting
{
public:
    /* Function to print an array */
    static void printArray(T *start, T *end)
    {
        int size = end - start;
        for (int i = 0; i < size - 1; i++)
            cout << start[i] << ", ";
        cout << start[size - 1];
        cout << endl;
    }

    static void selectionSort(T *start, T *end);
};
```

For example:

Test	Result
int arr[] = {9, 2, 8, 1, 0, -2};	-2, 2, 8, 1, 0, 9
Sorting<int>::selectionSort(&arr[0], &arr[6]);	-2, 0, 8, 1, 2, 9
	-2, 0, 1, 8, 2, 9
	-2, 0, 1, 2, 8, 9
	-2, 0, 1, 2, 8, 9

Answer: (penalty regime: 0 %)

Reset answer

```
1 template <class T>
2 void Sorting<T>::selectionSort(T *start, T *end)
3 {
4     int length = end - start;
5     for(int i = 0; i < length-1; i++){
6         int min = start[i];
7         int min_index = i;
8         for(int j = i+1; j < length; j++){
9             if (start[j] < min) {
10                 min = start[j];
11                 min_index = j;
12             }
13         }
14         swap(start[i], start[min_index]);
15         Sorting<T>::printArray(start, end);
16     }
17 }
```

Precheck

Kiểm tra

	Test	Expected	Got	
✓	<pre>int arr[] = {9, 2, 8, 1, 0, -2}; Sorting<int>::selectionSort(&arr[0], &arr[6]);</pre>	<pre>-2, 2, 8, 1, 0, 9 -2, 0, 8, 1, 2, 9 -2, 0, 1, 8, 2, 9 -2, 0, 1, 2, 8, 9 -2, 0, 1, 2, 8, 9</pre>	<pre>-2, 2, 8, 1, 0, 9 -2, 0, 8, 1, 2, 9 -2, 0, 1, 8, 2, 9 -2, 0, 1, 2, 8, 9 -2, 0, 1, 2, 8, 9</pre>	✓

Passed all tests! ✓

BÁCH KHOA E-LEARNING



WEBSITE

HCMUT

MyBK

BKSI

LIÊN HỆ

📍 268 Lý Thường Kiệt, P.14, Q.10, TP.HCM

☎ (028) 38 651 670 - (028) 38 647 256 (Ext: 5258, 5234)

✉ elarning@hcmut.edu.vn

Copyright 2007-2022 BKEL - Phát triển dựa trên Moodle