#include <iostream>

using namespace std;

// Hàm hoán d?i ph?n t?

void swap(int\* a, int\* b) {

int t = \*a;

\*a = \*b;

\*b = t;

}

/\* Hàm chính c?a QuickSort

a[] --> mang can sap xep,\*/

void quickSort(int a[], int l, int r) {

if (l < r) {

int m = (l + r) / 2;

int pivot = a[m];

int i = l, j = r;

do {

while (a[i] < pivot) i++;

while (a[j] > pivot) j--;

if (i <= j) {

swap(&a[i], &a[j]);

i++;

j--;

}

} while (i <= j);

quickSort(a, l, j);

quickSort(a, i, r);

}

}

// Hàm hien thi mang

void display(int a[], int size) {

for (int i = 0; i < size; i++)

cout << a[i] << " ";

cout << endl;

}

// Hàm main

int main() {

int a[] = {10, 7, 8, 9, 1, 5};

int n = sizeof(a) / sizeof(a[0]);

quickSort(a, 0, n - 1);

cout << "Mang da sap xep: \n";

display(a, n);

return 0;

}