#include <iostream>

using namespace std;

int GetPivot(int \*num, int start, int end)

{

int i = start, j = end, key = num[start];

while (i < j)

{

while (i < j && num[j] > key) j--;

if (i < j) num[i++] = num[j];

while (i < j && num[i] < key) i++;

if (i < j) num[j--] = num[i];

}

num[i] = key;

return i;

}

void QSort(int \*num, int start, int end)

{

if (start < end)

{

int pivot = GetPivot(num, start, end);

QSort(num, start, pivot - 1);

QSort(num, pivot + 1, end);

}

}

int main(int argc, const char \* argv[]) {

int num[] = { 5, 3, 6, 7, 4 };

QSort(num, 0, sizeof(num) / sizeof(int) - 1);

for (int i = 0, size = sizeof(num) / sizeof(int); i < size; i++)

{

cout << num[i] << endl;

}

return 0;

}

