#include<iostream.h>

using namespace std;

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

void sort012(int a[], int arr\_size)

{

int lo = 0;

int hi = arr\_size - 1;

int mid = 0;

while (mid <= hi)

{

switch (a[mid])

{

case 0:

swap(&a[lo++], &a[mid++]);

break;

case 1:

mid++;

break;

case 2:

swap(&a[mid], &a[hi--]);

break;

}

}

}

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

{

int temp = \*a;

\*a = \*b;

\*b = temp;

}

void printArray(int arr[], int arr\_size)

{

int i;

for (i = 0; i < arr\_size; i++)

cout << arr[i] << " ";

cout << "";

}

int main()

{

int arr[] = {1, 0, 1, 0, 2, 0, 2, 0};

int arr\_size = sizeof(arr)/sizeof(arr[0]);

int i;

sort012(arr, arr\_size);

cout << "array after segregation ";

printArray(arr, arr\_size);

getchar();

return 0;

}

