

Examp l e21. c

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//Examp l e21
#include <stdio.h>
#include <stdlib.h>
#define N 5
void swap(int *, int *);
void bubble(int [], int);
int main ()
{
    int i, array[N], *pa;
    i = 1;
    for (pa = array; pa < &array[N]; pa++)
    {
        printf("Enter an integer %d of %d: ", i++, N);
        scanf("%d", pa);
    }
    printf("Data: \n");
    i = 1;
    for(pa = array; pa < array + N; pa++)
    {
        printf("array[%d] = %d\n", i++, *pa);
    }
    bubble(array, N);
    printf("Sorted: \n");
    for(i = 0; i < N; i++)
    {
        printf("array[%d] = %d\n", i+1, array[i]);
    }
    system("pause");
    return 0;
}

void swap(int *a, int *b)
{
    int t;
    t = *a;
    *a = *b;
    *b = t;
}

void bubble(int a[], int n)
{
    int more = 1;
    int e = n-1;
    int i;
    while(more == 1)
    {
        more = 0;
        for(i = 0; i < e; i++)
        {
            if(a[i] > a[i+1])
            {
                more = 1;
                swap(&a[i], &a[i+1]);
            }
        }
        e--;
    }
}
}
```