

06/05/17 03:34:31 /Users/darkcloud/Desktop/Lab9/[Lab9] Adnar Lozano_insert_sort_1.cpp

```
1  /*input
2  5
3  2 4 6 8 3
4  */
5
6  #include <stdio.h>
7  #include <string.h>
8  #include <math.h>
9  #include <stdlib.h>
10 #include <assert.h>
11
12 void insertionSort(int ar_size, int * ar) {
13     for (int i = 0; i < ar_size; i++) {
14         int value = ar[i];
15         int temp = i - 1;
16         while (temp >= 0 && value < ar[temp]) {
17             ar[temp+1] = ar[temp];
18             temp = temp-1;
19             for (int k=0; k < ar_size; k++)
20                 printf("%d ", ar[k]);
21             printf("\n");
22         }
23         ar[temp+1] = value;
24     }
25     for(int j = 0; j < ar_size; j++)
26         printf("%d ", ar[j]);
27     printf("\n");
28 }
29 int main(void) {
30     int _ar_size;
31     scanf("%d", &_ar_size);
32     int _ar[_ar_size], _ar_i;
33     for(_ar_i = 0; _ar_i < _ar_size; _ar_i++)
34         scanf("%d", &_ar[_ar_i]);
35     insertionSort(_ar_size, _ar);
36     return 0;
37 }
```