

CSE 2003: Lab Assignment #9

Due on Thursday, March 30, 2017

Prof. Shaik Naseera 2:00pm

Jacob John

Contents

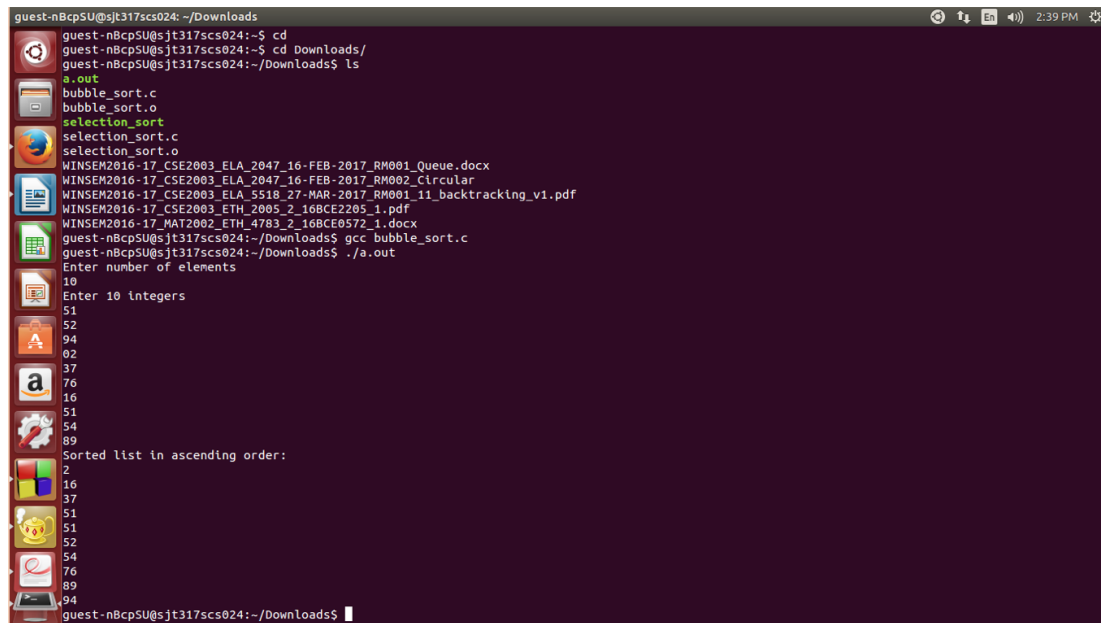
Problem 1	3
-----------	---

Problem 1

Implement a bubble sort program using brute force using C

Listing 1: Bubble sort using C

```
/*Program for bubble sort in C*/  
#include <stdio.h>  
int main()  
{  
5   int array[100], n, c, d, swap;  
    printf("Enter number of elements\n");  
    scanf("%d", &n);  
    printf("Enter %d integers\n", n);  
    for (c = 0; c < n; c++)  
10   scanf("%d",&array[c]);  
    for (c = 0 ; c < ( n - 1 ); c++)  
    {  
        for (d = 0 ; d < n - c - 1; d++)  
        {  
15             if (array[d] > array[d+1]) /* For decreasing order use < */  
            {  
                swap = array[d];  
                array[d] = array[d+1];  
                array[d+1] = swap;  
20            }  
        }  
    }  
    printf("Sorted list in ascending order:\n");  
    for ( c = 0 ; c < n ; c++ )  
25     printf("%d\n", array[c]);  
    return 0;  
}/*End of main()*/
```

Output:

```
guest-nBcpSU@sjt317scs024: ~/Downloads
guest-nBcpSU@sjt317scs024:~$ cd
guest-nBcpSU@sjt317scs024:~$ cd Downloads/
guest-nBcpSU@sjt317scs024:~/Downloads$ ls
a.out
bubble_sort.c
bubble_sort.o
selection_sort.c
selection_sort.o
WINSEM2016-17_CSE2003_ELA_2047_16-FEB-2017_RM001_Queue.docx
WINSEM2016-17_CSE2003_ELA_2047_16-FEB-2017_RM002_Circular
WINSEM2016-17_CSE2003_ELA_5518_27-MAR-2017_RM001_11_backtracking_v1.pdf
WINSEM2016-17_CSE2003_ETH_2005_2_16BCE2205_1.pdf
WINSEM2016-17_MAT2002_ETH_4783_2_16BCE0572_1.docx
guest-nBcpSU@sjt317scs024:~/Downloads$ gcc bubble_sort.c
guest-nBcpSU@sjt317scs024:~/Downloads$ ./a.out
Enter number of elements
10
Enter 10 integers
51
52
94
02
37
76
16
51
54
89
Sorted list in ascending order:
2
16
37
51
51
52
54
76
89
94
guest-nBcpSU@sjt317scs024:~/Downloads$
```