

# ESc101N: Fundamentals of computing(Lab Session 4)

August 24, 2009

## Instructions

1. Please read the question carefully and write the program accordingly
2. Make sure that the TA has graded you program
3. The marks are distributed as follows. You get 60% of the marks if the basic algorithm is current, 20% if you manage to compile and execute and 20% for writing the code cleanly, i.e. using proper variable names, intending and making the code more readable.

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### Question 1. Array reading and finding minimum.

- (a) (5 marks) Declare an array of 100 integers. Read from the user a list size  $n$  and read that many integers into the array.
- (b) (5 marks) Find the minimum element in the array and print it.

The sample out put should be as follows.

```
$ ./a.out
enter the list size: 5
start entering the numbers
3
-1
4
6
7
the minimum of {3,-1,4,6,7} is -1
$
```

### Question 2. (0 marks) (Not to be graded). Given a string of digits (read it using `scanf("%s", str)`) consider this as an integer and find its successor. Thus if the string is 1234 then the output should be 1235. Do not convert the string into integers as the number of digits can be large.

The skeleton of the program is given below.

```
# include <stdio.h>
int main()
{
    char buf[1000];
    printf("enter the large number: ");
    scanf("%999s",buf);
    /* write your loop here */
    printf("The successor of the number is\n %s", buf);
}
```