

CSE108

LAB MIDTERM – SPRING 2013

PART 1 (30 Pts)

Write two functions, **read_array** and **find_stats**. **read_array** function will read an array of integers from a file and return the array. **find_stats** function will get an array of integers and return the minimum, maximum and mean values of the array. Write the code below and test your functions.

```
#define MAX_LEN 100
#define FILE_NAME "integers.txt"

int main()
{
    int max, min, mean;
    int arr[MAX_LEN];

    ... read_array(.....);
    ... find_stats(.....);
    printf("max:%d, min:%d, mean:%d \n",max,min,mean);
    return 0;
}
```

PART 2 (30 Pts)

Write a function that gets an array of strings and sorts the array according to the lengths of the strings. Test your function in main by getting some strings from the user.

PART 3 (40 Pts)

Prepare a text file manually with some names in each line. An example file may include:

Ali Can
Seda
Veli
Ayşe Nur

Write a function that gets a sentence with two types of tags, name tags (ex. *n5) and month tags (ex. *m3). The function will replace the tags with appropriate names or months. The numbers in the name tags show the row of the name and the numbers in the month tags show the number of the month. Example sentences may be:

Input sentence
*n3 goes to Ankara in *m5.
*n1 and *n4 met in *m10.

Output sentence
Veli goes to Ankara in May.
Ali Can and Ayşe Nur met in October.

Test your function in main by getting some sentences with tags from the user. (Assume that the user will enter correct tags.)

***You are not allowed to ask any questions during the exam!!!**