

**STA Online Computer Programming Contest (DWITE)
November 2002**

Problem 2

THE FIVE M's OF STATS 101

Five commonly reported statistic figures (that notably start with the letter “m”) include the:

- 1) mean
- 2) median
- 3) mode
- 4) maximum
- 5) minimum

Your job is to calculate these five figures from a given set of values.

The first line of the input file (DATA2) will contain the integer n ($0 < n \leq 1000$), which represents the number of values in the set. The next n lines will contain the real values ($-1000 \leq \text{value} \leq 1000$) of the set, each on a separate line.

The output file (OUT2) will contain five lines of data, each representing the statistic figure, listed in the order above. Each figure should be rounded to two decimal places, left justified.

Note: There will be only one mode in the set of values.

Sample Input

```
10
1
2
3
4.5
3
6
7.5
8
9
10
```

Sample Output

```
5.40
5.25
3.00
10.00
1.00
```