
Algorithm 3.1.19 Find the maximum, median, mean, and minimum from a set of three integers

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1: procedure STATS( $x$ : integer;  $y$ : integer;  $z$ : integer)
2:    $a_1 \leftarrow x$ 
3:    $a_2 \leftarrow y$ 
4:    $a_3 \leftarrow z$ 
5:   for  $i = 1$  to 2 do                                      $\triangleright$  Bubble sort  $a_1, a_2, a_3$ 
6:     for  $j = 1$  to 2 do
7:       if  $a_j > a_{j+1}$  then
8:         swap  $a_j$  and  $a_{j+1}$ 
9:       end if
10:    end for
11:  end for
12:   $minimum \leftarrow a_1$ 
13:   $maximum \leftarrow a_3$ 
14:   $median \leftarrow a_2$ 
15:   $mean \leftarrow \frac{a_1 + a_2 + a_3}{3}$ 
16:  return  $maximum, median, mean, minimum$ 
17: end procedure
```
