

Section 3.1
Problem 20

Describe an algorithm for finding both, the largest and the smallest integers in a finite sequence of integers. (Here we will be adopting the conventional single equal sign is for assignment).

Procedure *smallest/largest*($b_1, b_2, b_3, \dots, b_n$: integers)

```
    sml =  $b_1$ 
    lgt =  $b_1$ 
  for  $i = 1$  to  $n$ 
    if sml  $\leq b_i$ 
      then
        sml =  $b_i$ 
    if lgt  $\geq b_i$ 
      then
        lgt =  $b_i$ 
  return sml
  return lgt
```