Prove that Selection Sort is correct.

data
n

$$data[1] \le data[2] \le \dots \le data[n]$$

1   n

1
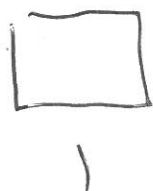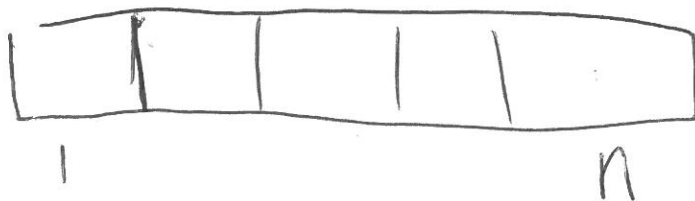
$data[i]$
$\le data$
[After first iteration, array min is swapped to
data[1]. Afterwards, data[1] will be $\le$ all
$\le data[2]$ other elements. At (2nd) iteration, we select
$\le data$ (3) min of data[(2) · n] and swap to data[(2)],
so data[(2)] $\le$ every element that follows.

$\forall i, \; data[i] \le data[i+1].$ ∎