Developments — which you should attempt before hand — to be sketched in clas

1. Recursive and iterative procedures to decide whether an integer $n \geq 0$ is sorted. (ie, whether its digits occur in non-decreasing order.)

2. Recursive and iterative procedures to return the number formed from an integer $n \geq 0$ by sorting the digits of n.

   → insertion sort
   → selection sort

3. Recursive and iterative procedures which input integers $m \geq 0$ and $n \geq 0$ and which decide whether all the digits of m occur in n, in the same order.

4. Recursive and iterative procedures which input an integer $n \geq 0$ and a digit d and which return the number obtained from n by removing the leftmost occurrence of d.