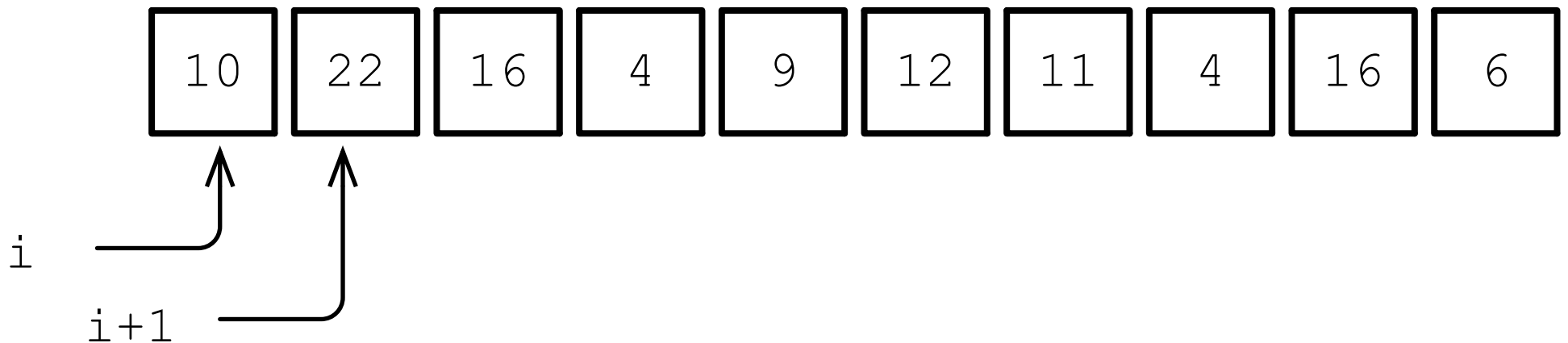


## Bubble Sort:

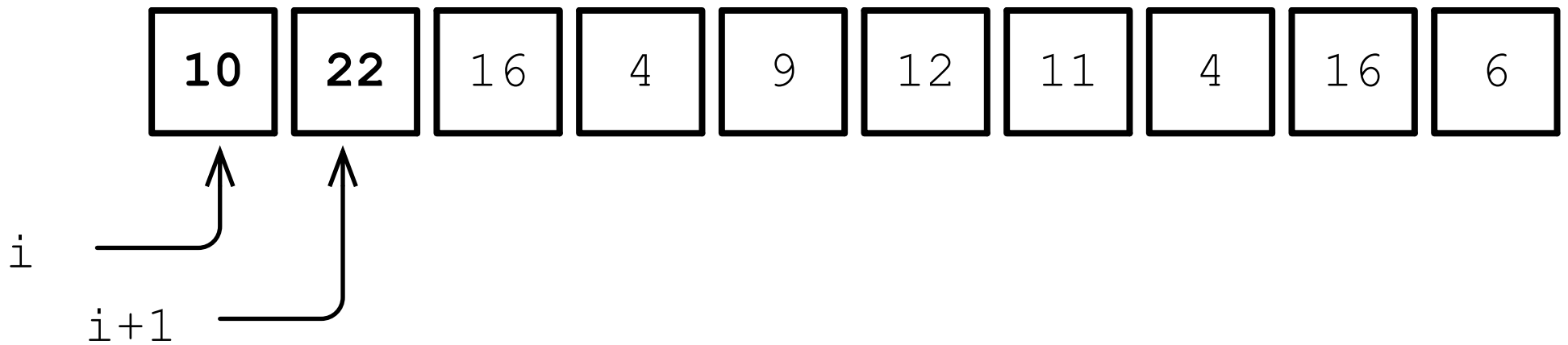
Start at beginning, and look at each pair of neighboring cells. When they are out of order, swap them.

Keep doing this until the whole thing is sorted.



i=0

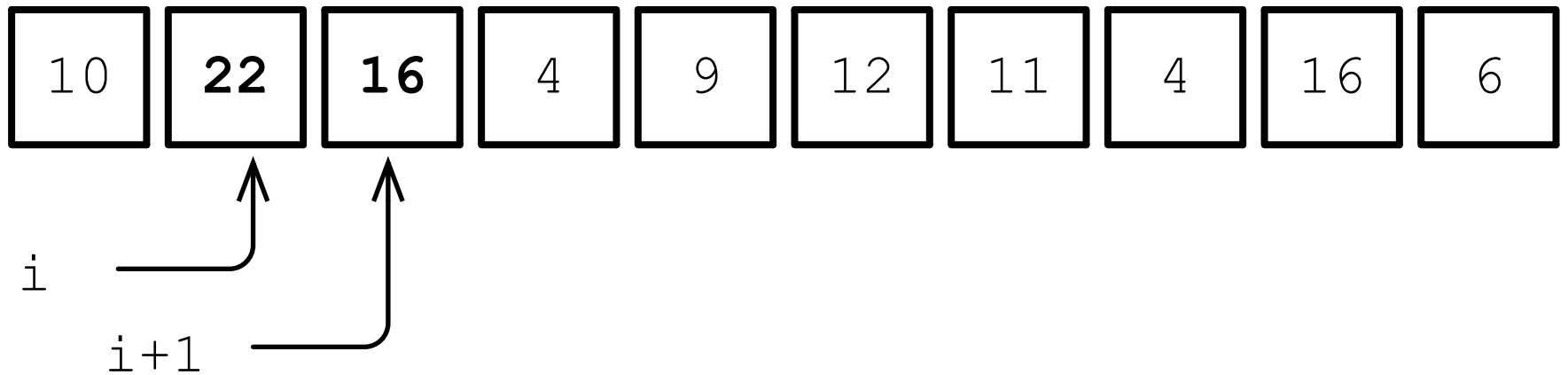
Cell order ok.



i=1

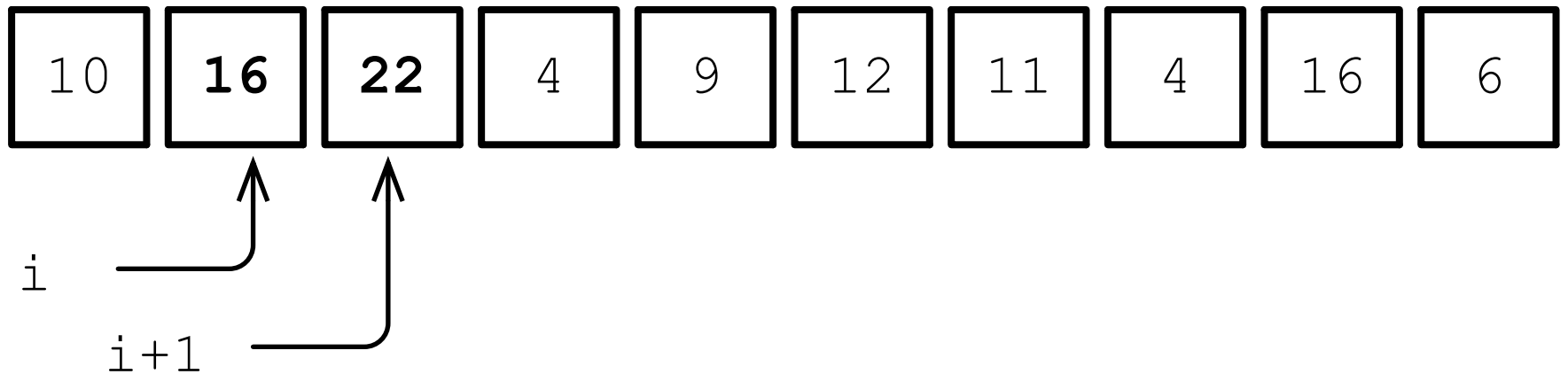
Cell order not ok.

Swap!



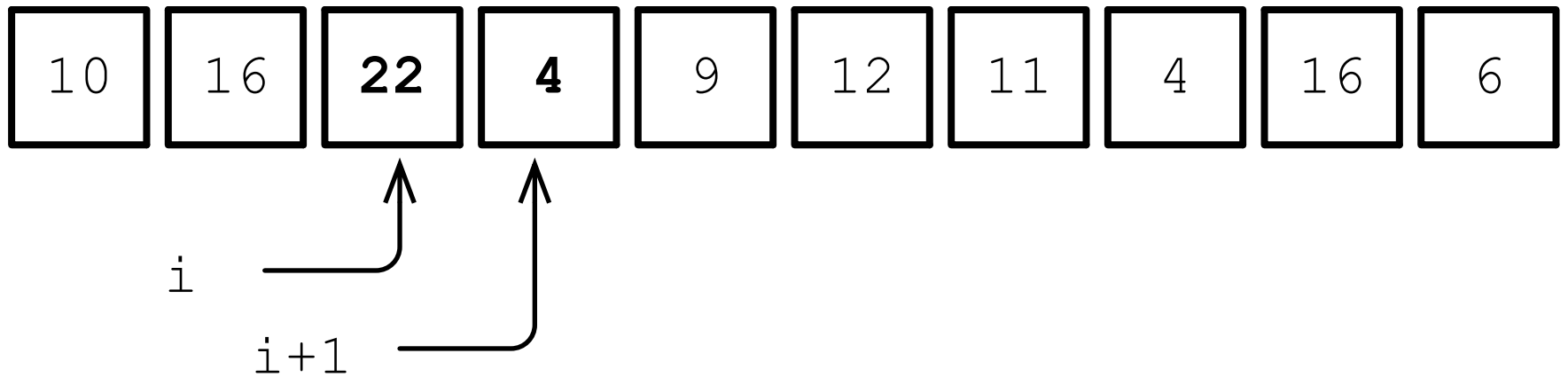
$i=1$  (after swapping)

Cell order is now correct.



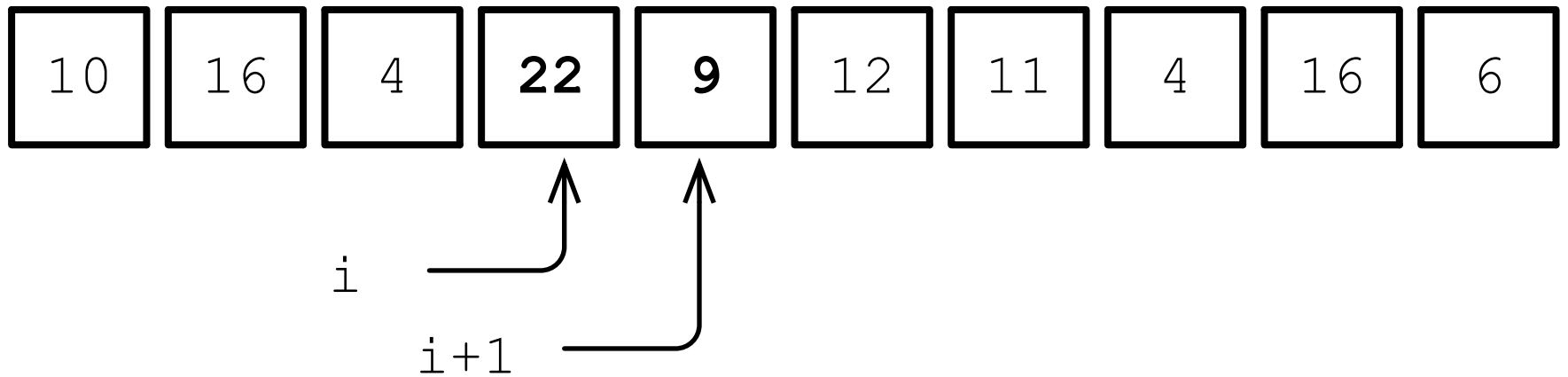
i=2

Wrong order again. Swap!

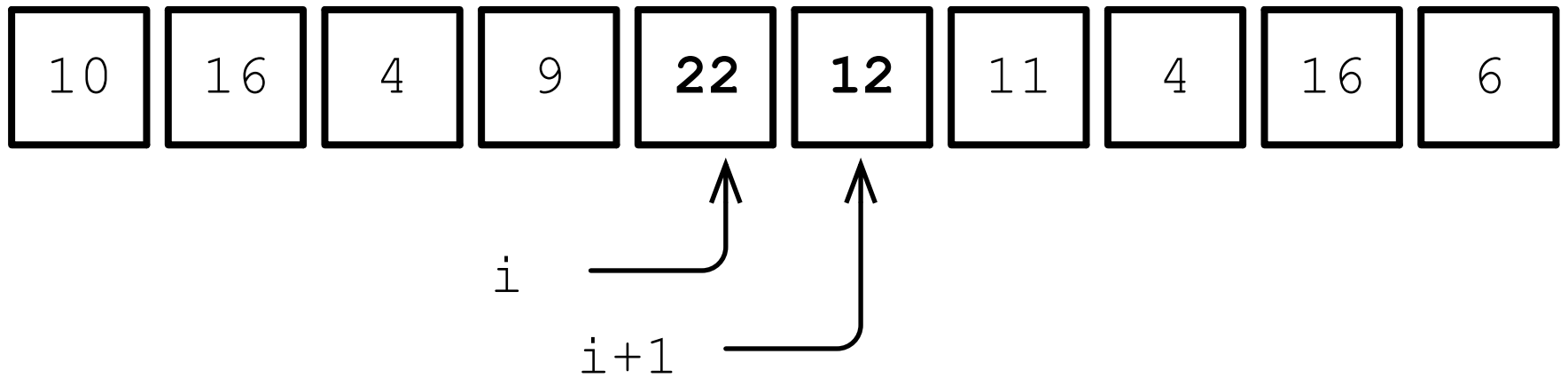


$i=3$

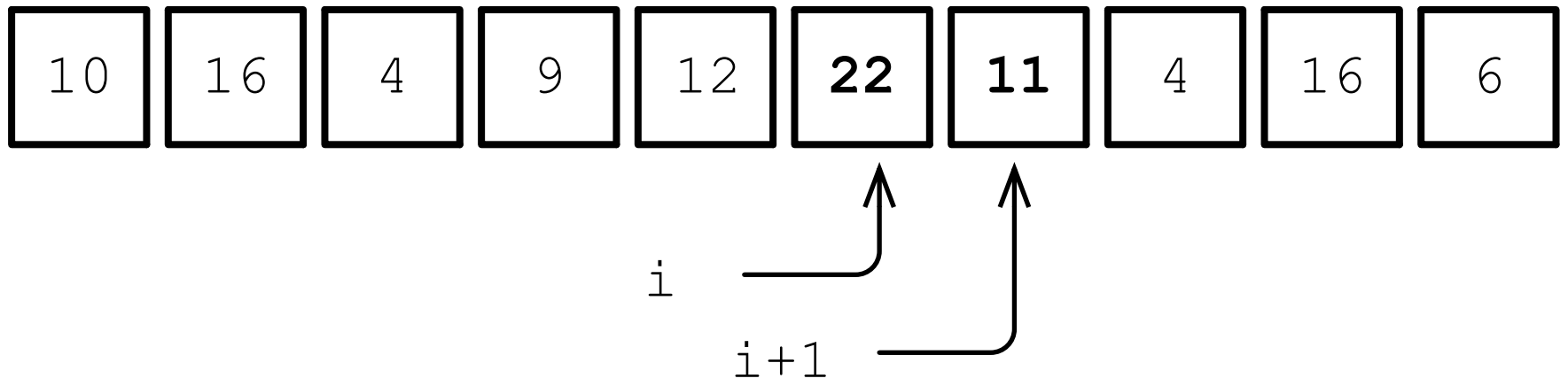
Wrong order again. Swap!



$i=4$

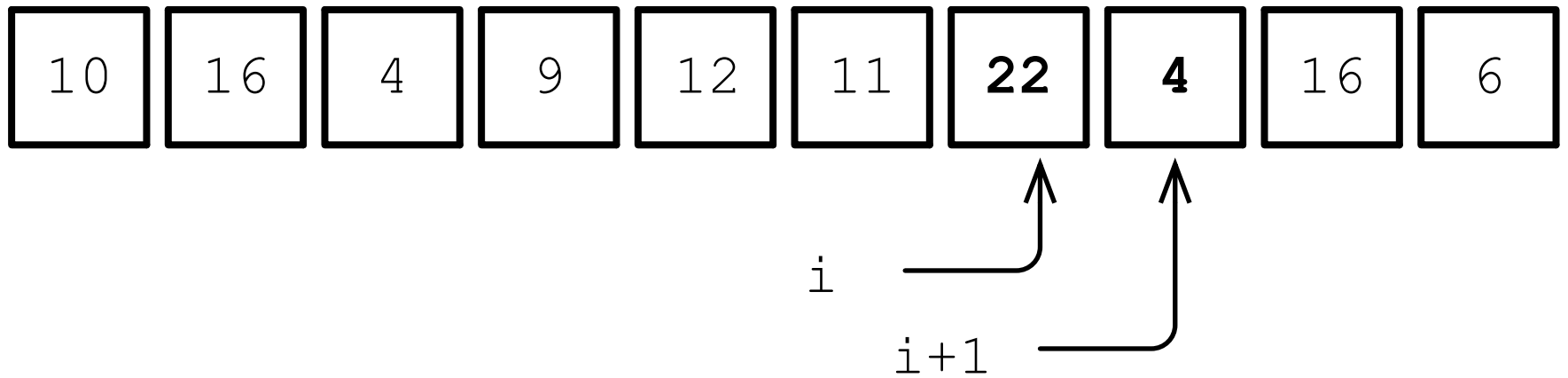


$i=5$

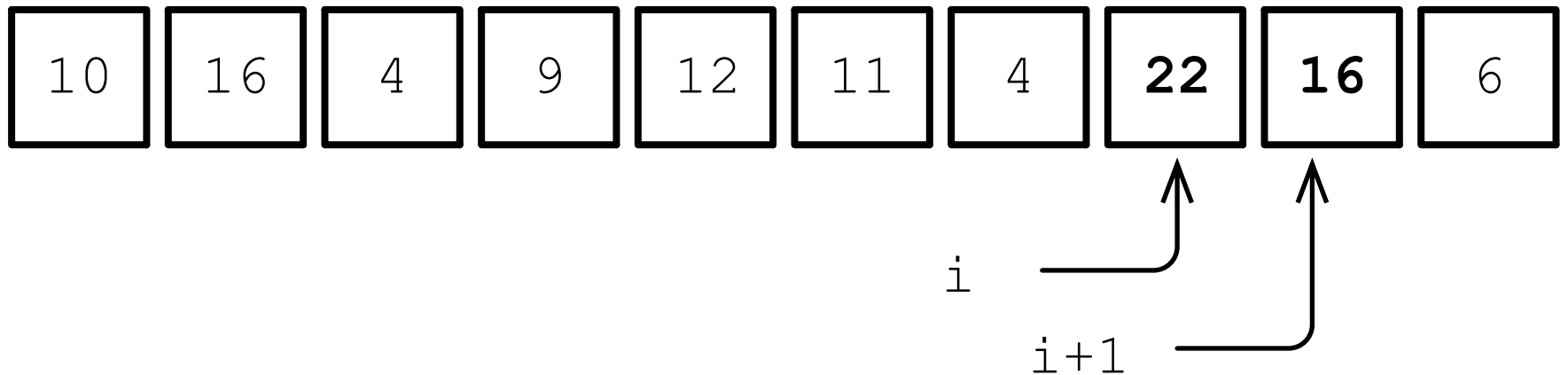




$i=6$

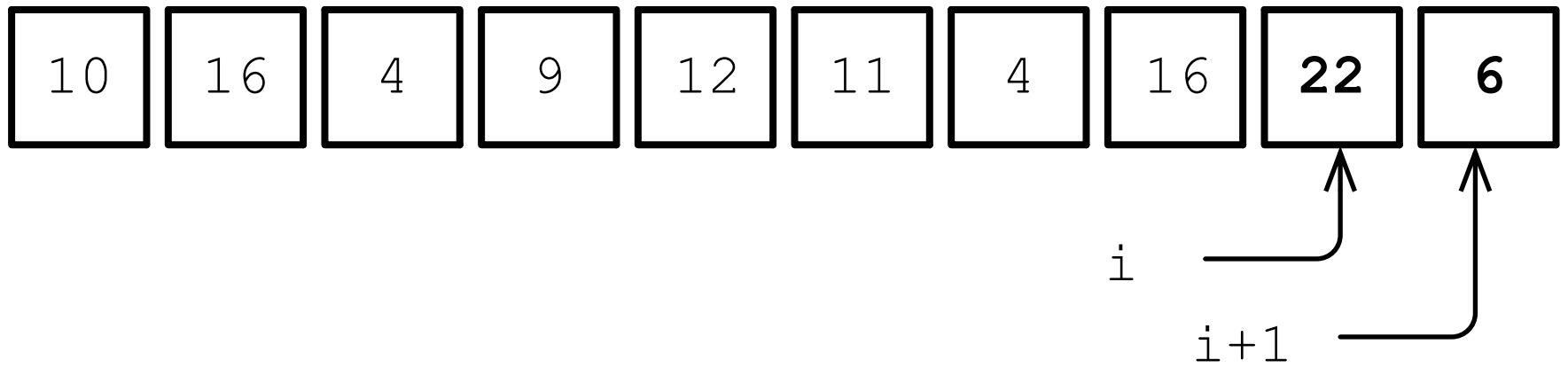


$i=7$



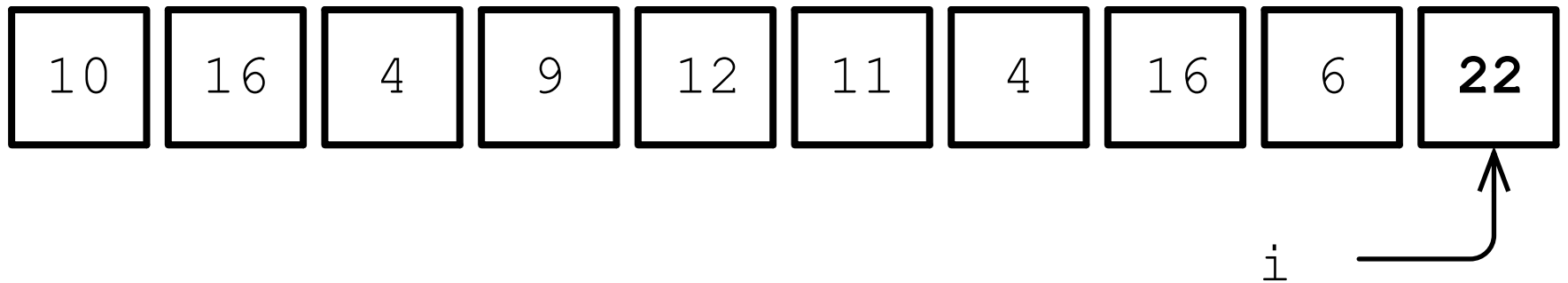
Notice how small values gradually shift left and larger values shift right.

$i=8$



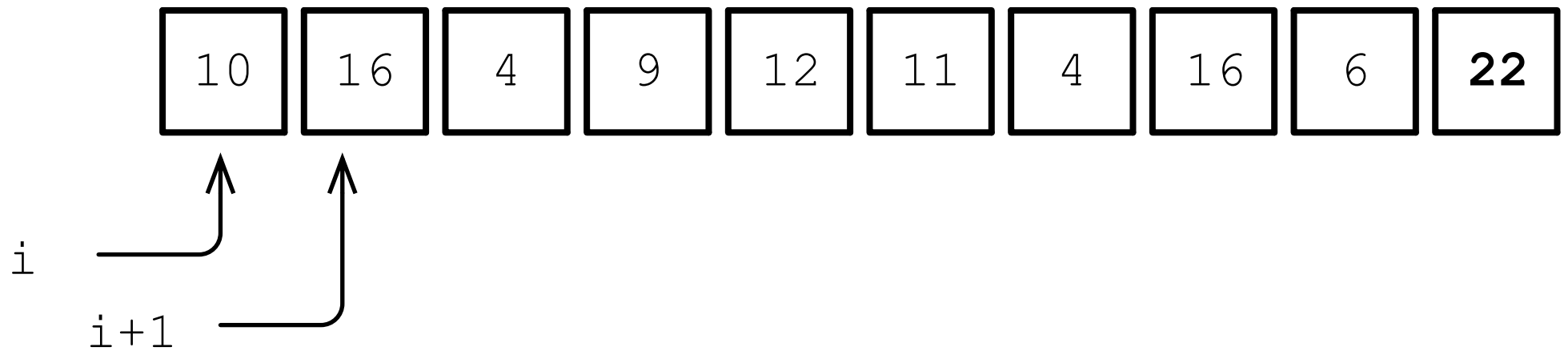
$i=9$

No more neighbor pairs. Since we swapped at least one time since we set  $i=0$ , run through the algorithm one more time.



`i=0`. A fresh run through the data.

Order is ok.



This process continues until the whole list is in nondecreasing order.

Here's the final output.

