

# Insertion Sort

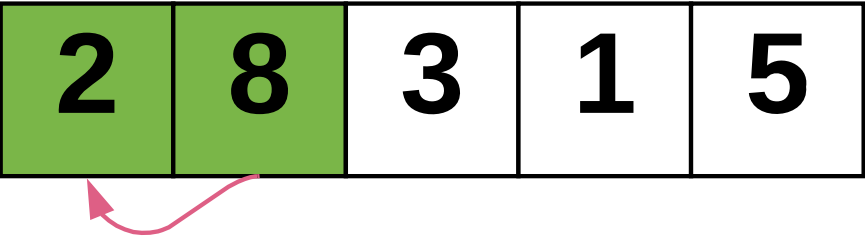
Every item is compared to every item to its left. If it is smaller, it swaps position with the item



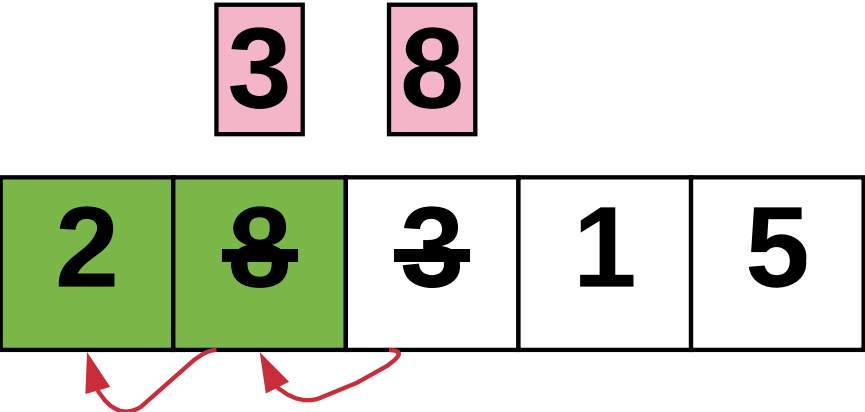
There is no item to the left of **2**, so it stays in place



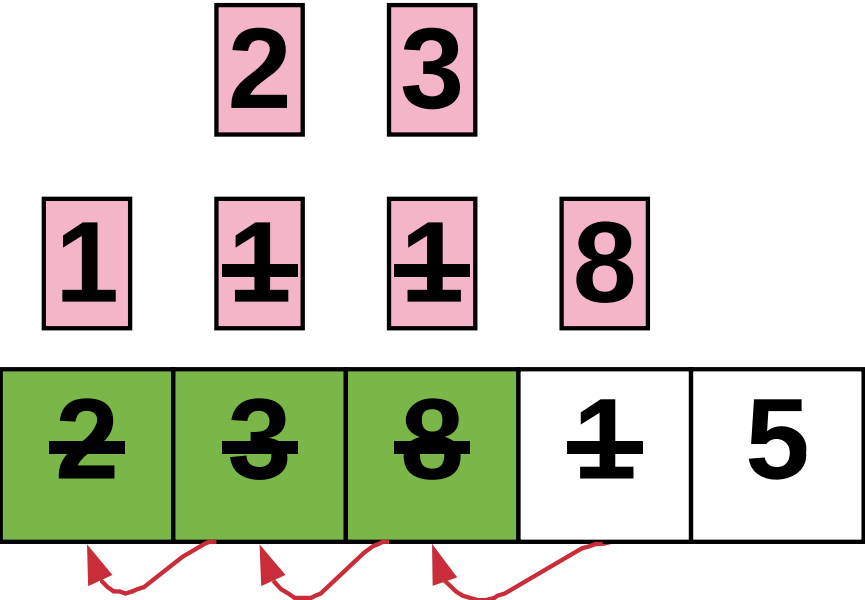
**8** is greater than **2** so it stays in position



**3** is less than **8** so they swap position.  
**3** is greater than **2** so stays in position



**1** is less than **8** so swaps position  
**1** is less than **3** so swaps position  
**1** is also less than **2** so swaps position.  
**1** has moved to the first position



**5** is the last item in the array. It is less than **8** so swaps position  
**5** is compared with every other item in the array but is greater than all so it remains in its position  
The array is now sorted

