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An insertion sort can be described as a void returning function which takes in an array of integers as its parameter, and traverses the array from the first element to the last element in the array, shifting elements of the array until an ascending order is established. The function compares the first element in the array to the second element in the array and if the first element is greater in value than the second element, the two elements are swapped. The function then checks the subsequent elements shifting the element at the 'current' position to the left until the element to the left of the element at the 'current' position is less in value than the element at the current position. The element at the 'current' position is then inserted into new position in the array. If there is no element less than the element at the 'current' position, the element at the current position is shifted to the left until it becomes the first element in the array. This process repeats itself until the elements in the array are in an ascending order. It is also possible to sort the array in a descending order and for the array to be of other types other than integer.

Figure 1: Insertion sort

