

Sorting Algorithm Chart

Sorting Algorithm	Big O	Recursive? (Yes/no)	Defining Characteristics	What that looks like in code
Bubble	$O(n^2)$	No	Swapping	<pre>temp = vec(1) vec(1) = vec(2) vec(2) = temp</pre>
Insertion	$O(n^2)$	No	Comparing and placing in appropriate spot	<pre>if num > vec(x) & num <=vec(x+1) vec = [vec(1:x) num vec(x+1:end)] end</pre>
Merge	$O(n \log n)$	Yes	Splitting in half	<pre>left = vec(1:round(end/2)) right = vec(round(end/2)+1: end)</pre>
Quick	Worst: $O(n^2)$ Average: $O(n \log n)$	Yes	Pivot	<pre>num = vec(1) left = vec(vec<num) right = vec(vec>=num)</pre>