

N	$O(n^2)$ pa_list	$O(n^2)$ pb_list	$O(n^2)$ pc_list	$O(n^2)$ pa_vec	$O(n^2)$ pb_vec	$O(n^2)$ pc_vec
8	0.052	0.052	0.059	0.14	0.022	0.014
9	0.102	0.102	0.097	0.301	0.042	0.291
10	0.207	0.141	0.134	0.492	0.058	0.435
11	0.286	0.287	0.269	1.177	0.116	0.991
12	0.586	0.588	0.559	3.258	0.233	2.451
13	1.186	1.19	1.12	10.138	0.482	6.603

roughly the same performance -- the dashed lines are almost indistinguishable.

The vector performance was a lot better when adding to the end of the array, because the beginning and the middle parts did not have to be moved. adding to the beginning of a continuous array showed the worst performance because then every single one of the elements of the array had to be moved. When inserting in the middle only half of the elements of the array have to be moved so performance is slightly better

