

# Title Goes Here

No Institute Given

**Abstract.** Abstract goes here

**1**   **Introductory Remarks**

**2**   **Related Work**

**3**   **Concluding Remarks**

**References**

Number of Buy Orders	Number of Sell Orders	Total Number of Orders	Gas Cost in Ether
1	1	2	127,959
3	3	6	274,265
5	5	10	449,684
7	7	14	603,057
9	9	18	817,224
11	11	22	982,549
13	13	26	1,210,410
15	15	30	1,403,040
17	17	34	1,609,720
19	19	38	1,862,796
21	21	42	2,057,234
23	23	46	2,266,225
25	25	50	<b>out of gas</b>

Table 1: Gas used for Match function when using dynamic arrays to store the heap.

Number of Buy Orders	Number of Sell Orders	Total Number of Orders	Gas Cost in Ether
1	1	2	144,689
3	3	6	324,457
5	5	10	527,289
7	7	14	710,050
9	9	18	964,894
11	11	22	1,176,905
13	13	26	1,370,191
15	15	30	1,650,273
17	17	34	1,953,406
19	19	38	2,205,141
21	21	42	2,416,221
23	23	46	2,713,313
25	25	50	1,788,509
27	27	54	2,004,824
29	29	58	<b>out of gas</b>

Table 2: Gas used for Match function when using static arrays to store the heap.

Number of Buy Orders	Number of Sell Orders	Total Number of Orders	Gas Cost in Ether
1	1	2	177,622
3	3	6	341,393
5	5	10	524,680
7	7	14	685,830
9	9	18	919,636
11	11	22	1,094,503
13	13	26	1,347,199
15	15	30	1,559,796
17	17	34	1,792,040
19	19	38	2,076,422
21	21	42	2,294,229
23	23	46	2,532,674
25	25	50	2,776,988
27	27	54	3,069,163
29	29	58	3,306,749
31	31	62	3,551,195
33	33	66	<b>out of gas</b>

Table 3: Gas used for Match function when storing the order structs in mappings and storing the keys in the dynamic arrays that represent sorted heap.