

Nama : Nisa Rianti

NPM : 2208107010018

Mata Kuliah : Struktur Data dan Algoritma

- **Hasil Evaluasi**

Jenis Algoritma	Jumlah Bilangan	Waktu Eksekusi (ms)
Bubble Sort	100k	22926 ms
	200k	91991 ms
	300k	207296 ms
	400k	368305 ms
	500k	575174 ms
	600k	874270 ms
	700k	2660788 ms
	800k	1500023 ms
	900k	1822401 ms
	1000k	2249226 ms
Selection Sort	100k	9204 ms
	200k	36579 ms
	300k	82175 ms
	400k	146134 ms
	500k	228203 ms
	600k	329031 ms
	700k	447499 ms
	800k	584837 ms
	900k	740581 ms
	1000k	913381 ms
Insertion Sort	100k	4819 ms
	200k	19122 ms
	300k	42886 ms

	400k	76184 ms
	500k	119117 ms
	600k	171208 ms
	700k	233270 ms
	800k	305150 ms
	900k	386084 ms
	1000k	476450 ms

The screenshot shows a Visual Studio Code interface with a C program named `2208107010018_Simple_Sorting.c` and its execution results in the terminal. The program compares Bubble Sort and Selection Sort for various input sizes (100k to 1000k) and sorts them into two groups: Group 1 (Bubble Sort) and Group 2 (Selection Sort).

Terminal Output:

```

PS D:\TUGAS ICA\SEMESTER 4\SDA\MK\Tes> gcc 2208107010018_Simple_Sorting.c -o 2208107010018
PS D:\TUGAS ICA\SEMESTER 4\SDA\MK\Tes> ./2208107010018
Jenis Algoritma Jumlah Bilangan Waktu Eksekusi (ms)
Bubble Sort 100k 22926.00
Bubble Sort 200k 91991.00
Bubble Sort 300k 207236.00
Bubble Sort 400k 368305.00
Bubble Sort 500k 575174.00
Bubble Sort 600k 874270.00
Bubble Sort 700k 2660788.00
Bubble Sort 800k 1508321.00
Bubble Sort 900k 1822402.00
Bubble Sort 1000k 2249226.00
Selection Sort 100k 9204.00
Selection Sort 200k 36579.00
Selection Sort 300k 82175.00
Selection Sort 400k 146134.00
Selection Sort 500k 228201.00
Selection Sort 600k 329031.00
Selection Sort 700k 447499.00
Selection Sort 800k 584837.00
Selection Sort 900k 748901.00
Selection Sort 1000k 91381.00
Insertion Sort 100k 4819.00
Insertion Sort 200k 19122.00
Insertion Sort 300k 42886.00
Insertion Sort 400k 76184.00
Insertion Sort 500k 119117.00
Insertion Sort 600k 171208.00
Insertion Sort 700k 233270.00
Insertion Sort 800k 305150.00
Insertion Sort 900k 386084.00
Insertion Sort 1000k 476450.00
PS D:\TUGAS ICA\SEMESTER 4\SDA\MK\Tes>

```