

CSE 306 L Week 3 : Symbol Table Implementation

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In this week's work, symbol table has been implemented in two ways

1. Using an array (la_array.c)
2. Using a hashmap (la_hash.c)

Three input files have been used to record the performance

S.No	Name	Size (kB)
1	stdarg.txt	4.1
2	stddef.txt	13.0
3	float.txt	17.0

The performance was measured on each insert and search operation into symbol table upon recognizing every identifier.

The performance reports corresponding to implementation and input can be found in the report directory

Following is the average time of all operations in symbol table per input file

		Execution Time (sec)			
		Insert		Search	
S. No	Input File	Array	Hash Map	Array	Hash map
1	stdarg.txt	0.000004	0.000003	0.000003	0.000003
2	stddef.txt	0.000004	0.000003	0.000004	0.000003
3	float.txt	0.000004	0.000003	0.000004	0.000003

It is observed that hash map has better performance (faster execution time) than array for both insert and search operations.