

Lab Six

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April 20, 2021

1 CRAFTING A COMPILER EXERCISES

1.1 EXERCISE 8.1

The hash table and binary search tree approaches are the most common ways to implement a symbol table. An advantage of the hash tree approach is that lookup and insertion can be done quickly and easily. From there, you can also check scope and type based on if there is a collision in the current scope. A disadvantage of the hash table approach is that much more complex to implement. An advantage of the binary search tree approach is that parent and child nodes could be used to check the scope. A disadvantage of this approach is that error handling and recovery would be harder than in a hash table.