

# Dylan Hobbs - Compiler Design - Assignment 1

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## Objective

Modify the Symbol Table file in CocoR to insert comments to the outputted file. These comments should describe each identifier with relevant information from the Symbol Table.

## Approach

The Symbol Table file contains Objects known as “Obj”. This Obj class has certain attributes attached to it that contain relevant information for a given entry. The “topScope” Obj is the topmost Object in the current scope.

It is from this object we will traverse a linked list of all identifiers that have been chained since the current scope has been opened.

I first set a variable to be the current topScope.locals Obj object. This is as the head of the linked list and we simply traverse until we hit a null pointer (end of list).

For each node in this linked list I print out relevant information using Console.WriteLine().

## Conclusion

After looking through the Symbol table file, compiling and observing the output it was fairly simple to understand what needed to be changed. It took a few iterations to find that topScope.local was the head of the list as my first attempt was to look through topScope.next itself.