

Lab Seven

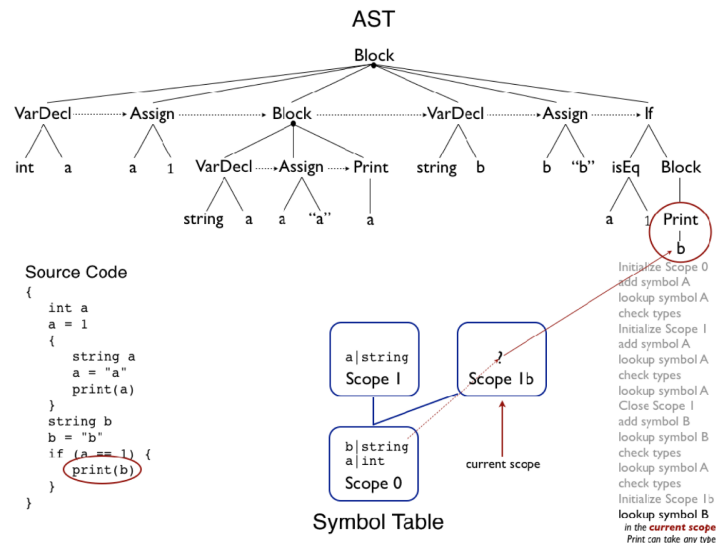
Shannon Cordoni

Shannon.Cordoni@Marist.edu

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1 PROBLEM ONE:

Describe what is happening in the diagram below.



In the diagram above it appears as if our compiler is walking through the semantic analysis process. Our current red pointers look as if we are processing the line that says "print(b)" and that we are currently looking that the block of code associated with the If Statement. By going through our AST it seems as in the first level or scope of the program we define the variable b as a string. Then once we hit our if statement we define a new block or scope of code to execute should the if statement be true. Since the variable b has been defined in scope 0 or the global scope we are able to access the variable b in scope 1b when calling print. When we hit this block of code we can look up b in our scope 0 hash table and return its value.