CS245 Lab 5: An Object-Oriented AST

For this project, you will need to obtain the version of the translator that we developed in lecture — check out the "OOP" project to get it. It contains a complete parser, a nearly-complete set of AST classes (Let_Node is missing), and a partial set of Translate functions (which do not currently have any mechanism for passing around AST data or translating Let nodes or Variable Use nodes). Your job is to complete the translator.

1. Create the class `Let_Node`, to represent the "let" operation; for now, just make the `Translate` function return the string "`("Let node not translated", 0)`" (you'll need to use `\"` in the string to get the quotation marks into the string — see `Dec_Node::Translate` for an example of this).
2. Implement a better Translate function, to allow translations of Let Nodes and Variable Use Nodes. You may, if you wish, change the parameters to the Translate functions, but you must *make them all take the same set of parameters*.

If you wish, you may build this project in a language other than C++, as long as you create a set of AST node classes that are related via inheritance in the same way as the C++ classes we did in class. Let me know if you would like to do this.

Remember to submit your work via "Team->Commit" when you're done. You may also want to commit as you get each part working (if you need me to, I can get back any earlier version you submitted).