

Basically, we start the tree from the top to bottom, where we pass the information of a node into the program to TypeNode, and give their parent class their type information. That is the foundation of this project.

Then, to specify the return type in each function, we also want to leave the return type's information to its child node as well. So that we are able to know what type we want to return in the function.

Specifically, we create a ErrNode for each error so that when we go back to the ProgramNode, we are able to print out the corresponding error message. When we are doing the operand, check the types are what we want, and wrong pattern of operations if not return a error node. Otherwise, return a normal node.