Part 1

How to invoke:

javac P1.java

java P1

Assumptions: Implementations of Sym.java, SymTable.java, DuplicateSymException.java, and EmptySymTableException.java are in the same folder as P1.java

Test explanations (more in-depth comments found in P1.java)

Test 1: tests the Sym class and methods getType() and toString()

Test 2: tests the addScope and removeScope methods from the SymTable class

Test 3: tests if EmptySymTableException is thrown correctly for addDecl, lookupLocal, lookupGlobal and removeScope methods in SymTable

Test 4: tests the addDecl method of SymTable

Test 5: tests the lookupLocal method of SymTable

Test 6: tests the lookupGlobal method of SymTable

Test 7: tests the print method of SymTable. Outputs expected result and actual return value

Part 2

Includes submission of Sym.java, SymTable.java, DuplicateSymException.java, and EmptySymTableException.java files that are required for invocation of P1.java.