## Usage:

• javac -d ./bytecode \*.java && (cd ./bytecode && java P1)

#### Prerequisites:

• OpenJDK 11

#### Tests documentation:

#### public class P1

P1 class: tests the SymTable & related classes - Sym

Note: test methods tend to preserve names of corresponding methods being verified & are prefixed with "test\_".

Note: "print" method is used althroughout the unit tests, which excludes it from being tested.

## public static void main(String[] args)

test driver: calls unit test methods & annotates each test with pass/fail status

• Parameters: args — input arguments if any

#### public static boolean test\_Sym()

checks the correctness of the constructor & related getter/setter methods implemented in the Sym class

#### public static boolean test\_exception()

checks the correctness of custom checked exception classes

#### public static boolean test\_SymTable()

checks the correctness of the constructor implemented in the SymTable class

#### public static boolean test\_addDecl()

checks the correctness of the add Decl method in the SymTable class depends on remove Scope method  $\,$ 

#### public static boolean test\_addScope()

checks the correctness of the addScope implemented in the SymTable class

## public static boolean test\_lookupLocal()

checks the correctness of the lookupLocal implemented in the SymTable class

#### public static boolean test\_lookupGlobal()

checks the correctness of the lookupGlobal implemented in the SymTable class

## public static boolean test\_removeScope()

checks the correctness of the removeScope implemented in the SymTable class

# Compiler for a C- language

• C- is a simple programming language that uses Pascal identifiers.

## Terminology:

- identifier: lexical token naming language entities (e.g. variable or function names).
- symbol: memory instance storing information about a corresponding identifier token.

## To-do list:

#### Assignment submission:

- Create pdf from markdown: pandoc README.md -o <lastname.firstname.Pn.pdf>
  - generate markdown from javadoc and remove redundant comments or
  - generate javadoc to extract method headers: find . -type f -name
    "\*.java" | xargs javadoc -d ../javadoc
- Add headers for each file
- Verify code format
- Verify code execution on CSL machines