COMP 520 Compiler Design **Assignment 2**

Winter 2018 **Rubric**

STUDENT NAME	

PROGRAMS

INVALID	5 invalid test programs [1 point each] (a) Program is invalid according to the reference compiler (b) Program shows a unique declaration or typechecking error	/5

IMPLEMENTATION

AST	Compiler generates an AST for syntactically valid programs (a) AST is correctly generated [2 points] (b) AST contains no CST nodes or extra tokens [2 points]	/4
PRETTY PRINTING	`pretty` compiler option outputs pretty printed code to `stdout` (a) Output is valid MiniLang and equivalent to the input [2 points] (b) Output is "pretty" (tabs, newlines, spaces, etc.) [2 point]	/4
SYMBOL TABLE & TYPE-CHECKING	`symbol` compiler option outputs the symbol table to `stdout` (a) Symbol table contains all declared variables [1 points] (b) Identifiers are associated with the correct type [1 point]	/2
	Compiler is tested on a set of valid `MiniLang` programs using the `typecheck` option. For each test case, the compiler must exit with status code `0` and output `OK`	/5
	Compiler is tested on a set of invalid `MiniLang` programs using the `typecheck` option. For each test case, the compiler must exit with status code `1` and output `Error: <description>`	/4
	Compiler generates appropriate error messages for invalid programs	/1
CODEGEN	Compiler is tested on a set of valid `MiniLang` programs using the `codegen` option (a) Generated code is valid `C` [4 points] (b) Generated code has the correct semantics [4 points] (c) Generated code is well written and efficient [2 points]	/10

COMMENTS