Program Style Summary and Checklist

Program Format, Style, and Readability

Never   Mostly
  Sometimes   Always

Program Structure and Comments

___ ___ ___ ___ Program divided into appropriate functions and procedures
___ ___ ___ ___ Program begins with appropriate comments describing purpose
___ ___ ___ ___ Variables initialized appropriately
___ ___ ___ ___ Every function and procedure begins with pre/post conditions
___ ___ ___ ___ Comments used to describe main sections of work
___ ___ ___ ___ Other comments added to interpret program as needed
___ ___ ___ ___ Parameters used effectively to control passage of data in and out of functions

Program Readability

___ ___ ___ ___ Program easy to read and understand
___ ___ ___ ___ Descriptive identifiers used
___ ___ ___ ___ Indenting helps clarify program logic and readability
___ ___ ___ ___ Appropriate use of iteration (for, while) and recursion
___ ___ ___ ___ Appropriate use of conditionals (if, switch, Boolean expressions)

Input and Output Format

___ ___ ___ ___ User reminded what input is required
___ ___ ___ ___ Output appropriately printed and labeled

Selection of Types and Data Structures

___ ___ ___ ___   Data types model characteristics of problem
___ ___ ___ ___ Variables have appropriate types
___ ___ ___ ___ Appropriate data structure(s) used

Algorithm Design and Correctness

___ ___ ___ ___ Program meets specifications of problem
___ ___ ___ ___ Algorithms used correctly solve problem
___ ___ ___ ___ Algorithms used are appropriately efficient

Testing

___ ___ ___ ___ Numbered list of the full range of circumstances that can arise in problem
___ ___ ___ ___ Listing of all test specific cases with values to be used and expected outcome(s)
___ ___ ___ ___ For non-robot-based tests, runs conducted and identified for all identified cases
___ ___ ___ ___ Comments given regarding program correctness

Overall Style and Format

Bad   Excellent

___ ___ ___ ___ ___   Program Structure
___ ___ ___ ___ ___   Program Readability
___ ___ ___ ___ ___   Input and Output
___ ___ ___ ___ ___   Data structures
___ ___ ___ ___ ___   Algorithms
___ ___ ___ ___ ___   Testing