

## Programming Challenge

AREA	None	Some	Most	Mastery
<b>Presentation</b> Did the student(s) demonstrate a solid understanding of the software for project development?	No understanding of the software for project development.	Some understanding of the basic use of the software for project development.	Competence in the use of software for project development.	Mastery in the use of software for project development.
<b>Formatting</b> Is the code arranged in an orderly and logical manner?	None of the is code lined up on the left side of the page with no indentations..	Some of the is code lined up on the left side of the page and some of the indentation is consistent.	Most of the code lined up on the left side of the page and most of the indentation is consistent.	All of the code is lined up on the left side of the page and all of the indentation is consistent.
<b>Source Code Documentation</b> Is written text present that either explains how the code operates or how to use it?	No comments are present in the code.	Few, if any comments are present in the code or comments do not explain the code.	Some comments are present in the code and most comments explain the code.	Comments are used in appropriate places and describe the intent of the code.
<b>Execution/Performance</b> How does well does the program perform?	None of the program executes.	Program executes with some errors. Program handles few special cases and little testing has been completed.	Program executes with few errors. Program handles some special cases and some testing has been completed.	Program uses solution that is easy to understand and maintain. Programmer has analyzed many alternate solutions and has chosen the most efficient. Programmer has included the reasons for the solution chosen.
<b>Specifications</b> Does the program meet the specifications for the assignment?	The program does not follow the assignment description.	The program follows some of the assignment description.	The program follows most of the assignment description.	The program follows all of the assignment description.
<b>Software Usage</b> Was the software suitable for the project?	Software used was not appropriate for the project.	Some of the software used was appropriate for the project.	Software used was appropriate and enhanced the project.	Mastery in the choice and use of software to enhance the project.
<b>Efficiency</b> How efficient did the operations function to achieve the solution?	Program was not efficient.	Program uses logical solution that is easy to follow but it is not the most efficient. Program has considered alternate solutions.	Program uses an efficient and easy to follow solution (no confusing tricks). Programmer has considered alternate solutions and has chosen an efficient one.	Program uses outstanding solution that is easy to understand and maintain. Programmer has analyzed many alternate solutions and has chosen the most efficient.
<b>Comments:</b>				