# 5 Star Scale

#### 5 Star Scale

- Used to grade a program
- Correctness/Efficiency: \_\_\_\_\_/ 5 x 2 = \_\_\_\_/ 10
- Documentation: \_\_\_\_\_/ 5
- Structure/Complexity: \_\_\_\_\_/ 5
- Total: \_\_\_\_\_/ 20 (this ratio will be used to determine the applicable point score)

### Zip Files

- When submitting source code, be sure to submit <u>all</u> files required to run your program, unless indicated otherwise in the lab manual
- Files must be compressed using the <u>zip</u> format; no other formats are accepted
- Files that cannot be viewed (e.g., due to a corrupt zip file or a non-zip format) will result in a 0 grade for the submission
- GitHub provides a reliable way to download a repository in zip format, but make sure the GitHub version is up-to-date

Correctness/ Efficiency	Documentation	Structure/Complexity
- passes all tests	<ul> <li>well-documented, allowing another programmer to use all functions based on the header comments alone</li> </ul>	<ul> <li>well-engineered, consisting of a modular collection of simple, single-purpose functions</li> </ul>
- code review reveals no faults	<ul> <li>responsibilities of all functions are described well, without giving implementation details</li> </ul>	- constants are used whenever appropriate
<ul><li>efficient (given the requirements)</li></ul>	<ul> <li>all parameters, return values, and side effects are explained</li> </ul>	- globals are not used, unless unavoidable
- no redundant operations	<ul> <li>comments within all functions are helpful, without being distracting, making it easy to follow along</li> </ul>	- all constants and variables are named appropriately
		<ul> <li>no layout abnormalities (eg, missing or improper indentation)</li> </ul>
		- easily used and reused
		<ul> <li>no undesirable side effects, such as debug output</li> </ul>

Correctness/ Efficiency	Documentation	Structure/Complexity
- passes nearly all tests	<ul> <li>occasionally, there are comments that are not complete, helpful, and/or true</li> </ul>	- largely well-engineered, except for a few, minor issues
- a code review reveals nearly no faults; faults that are found, are minor	<ul> <li>could be improved by slightly reworded, slightly more, or slightly fewer comments</li> </ul>	- a few, minor issues with constants, variables, or layout
<ul> <li>generally efficient, except in a few minor cases</li> </ul>		<ul> <li>easily used and reused,</li> <li>except in a few, minor</li> <li>instances</li> </ul>
- at most a few redundancies		- generally no undesirable side effects

Correctness/ Efficiency	Documentation	Structure/Complexity
<ul> <li>passes half the tests,</li> <li>or more, but the failure</li> <li>rate is too high for a 4-star rating</li> </ul>	- in a number of cases, comments are cryptic, false, incomplete, misleading, missing, or redundant	<ul> <li>in need of reengineering due to a number of issues, none, or almost none of which, are major</li> </ul>
- a code review reveals a number of faults, but none, or almost none of them, are major		<ul> <li>on a number of occasions, there are issues with constants, variables, or layout</li> </ul>
- somewhat efficient, but there are a small number of major inefficiencies		<ul> <li>often easily used and reused, but there are a small number of major problems, none of which render the work unusable</li> </ul>
- potentially many redundancies		

Correctness/ Efficiency	Documentation	Structure/Complexity
- fails more than half the tests	<ul> <li>only little relevant documentation</li> </ul>	<ul> <li>a number of major issues, requiring major changes</li> </ul>
<ul> <li>a code review reveals a high number of faults, including a number of major faults</li> </ul>	<ul> <li>comments are often cryptic, false, incomplete, misleading, missing, or redundant</li> </ul>	- not easily used and reused
<ul> <li>not efficient, although slow progress is being made</li> </ul>		

## 1 Star

Correctness/ Efficiency	Documentation	Structure/Complexity
- TAILC NOALLY ALL THO TOCK	essentially no legitimate ocumentation	<ul> <li>only a few functions, many of which are responsible for too many things</li> </ul>
<ul> <li>code review reveals a proliferation of major faults</li> </ul>		- essentially not usable or reusable

## 0 Star

Correctness/ Efficiency	Documentation	Structure/Complexity
<ul> <li>fails all tests and/or does not run</li> </ul>	<ul> <li>no legitimate documentation and/or does not run</li> </ul>	<ul> <li>no legitimate code and/or does not run</li> </ul>
- source cannot be viewed	- source cannot be viewed	- source cannot be viewed