

The tree of program difficulty
What makes a programming problem hard?

Here's the rubric we followed for grading the different metrics -

Metric	Score	Meaning
Difficulty of the data structure used within the program and returned from the target function	1	Operations involve the primitive data-types defined by the languages such as int, char, float etc.
	2	Arrays are used, irrespective of the dimension of the array
	3	Any other advanced data structure is used, such as trees, linked lists etc.
Difficulty in deducing the algorithm	1	The approach/solution is fairly common and the candidate would have been through the core concept required in this problem in an intro to programming course.
	2	The approach/solution to the problem is not straightforward and will require deliberation from the candidate to get it right.
	3	The approach/solution to the problem requires a lot of thought and exposure to multiple concepts like recursion, advanced arithmetic operations etc. at the same time.
Difficulty in implementing the algorithm	1	The implementation involves very basic control structures and operators involved.
	2	The implementation requires an interaction with multiple variables and one or more control structures.
	3	The implementation requires interaction with multiple variables and needs careful handling of different data dependencies and control structures.
Edge information	1	Does not have any specific corner cases to be thought through to get the entire logic right.
	2	Specific corner cases need to be thought through to get the entire logic right.