

# Essential Skills for Algorithms & Programming: Modularity (1)

Grade	Standards: AP.M.01	Essential Skills
K	Not addressed at this level	
1	Not addressed at this level	
2	Not addressed at this level	
3	Decompose a simple problem into a precise set of sequences instructions.	Devise an <b>algorithm</b> , a set of ordered instructions, to solve a problem.
4	Decompose a large problem into smaller, manageable sub-problems to facilitate the <b>program</b> development process.	Break a complex problem (including a <b>programming</b> challenge) into smaller sub-problems.  Identify reasons for developing a number of programs to solve smaller sub-problems, rather than developing one program to address a larger, more complex problem.
5	Decompose a large problem into smaller, manageable sub-problems and then further into sets of sequenced instructions to facilitate the program development process.	Devise <b>algorithms</b> to solve identified sub-problems  Demonstrate how combinations to the solutions of sub-problems can simplify writing programs to solve complex problems.

Skills for Standard: AP.M.01 Grades 3-5

These annotations are a collaboration between [Maryland Center for Computing Education](#) and the [Maryland State Department of Education](#).