Computational Problem Solving

Decomposition

Decomposition is the process of taking a single, complex task and extracting smaller, more managable and easier to complete tasks that when completed will achieve the goal of the initial complex task.

Pattern Recognition

Pattern Recognition refers to analzying one or more problems and identifying common characteristics between them. Finding common patterns can show you where to reuse solutions to previously common problems.

Algorithms

An algorithm is simply a set of instructions that detail how a task is to be completed. Think of a checklist of chores, that is in essence, an algorithm.

Abstraction

Abstraction is the process of simplifying or generalizing a problem by reducing the amount of complexity and technical jargon in the explanaiton of the problem. Looking at the broad picture can help in identifying patterns previously elusive.