

Core Code Concepts

By Jeremy Griffith

The purpose of this document is to provide a basic Computer Science study guide for introductory programming courses tests.

# Nomenclature

The purpose of this section is to provide you with a focused list of all the terms you’ll need to understand if you’re studying Computer Science or a related field.

**Algorithm**: a set of instructions for solving a problem

**Application Program Interface (API)**: a collection of exposed interfaces and protocols for the purpose of general reuse

**Concatenation**: the process of combining things together like a pair of strings or several lists

**Constant**: a value that is fixed and cannot be changed

**Comment**: an annotation of a line or section of code

**Compiler**: a software system which converts code to lower-level code

**Documentation**: literature that provides details about a library or tool

**Function**: a set of instructions that can be referenced by a name

**Graphical User Interface**: an interface which allows the use of electronic devices via graphical icons and visual cues

**Integrated Development Environment (IDE)**: a source code editor with automation tools

**Interpreter**: a software system which converts code to lower-level code on-the-fly

**Library**: a collection of implementations for the purpose of general reuse

**Loop**: a repeated sequence of instructions until some condition is met

**Method**: a function that is associated with an object

**Method Overloading**: the ability to define multiple functions in the same scope with the same name

**Method Overriding**: the ability of a subclass to create a more specific version of a method already provided by its superclass

**Polymorphism**: the ability of a variable, method, or object to exist in multiple forms

**Pseudo Code**: an informal or simplified programming language used to describe how a program should execute

**Readability**: the measure of ease of interpretation and understanding of source code

**Recursion**: a method of problem solving which derives the solution from solutions to smaller sections of the same problem

**Variable**: a value that is subject to change

**Version Control**: a system that supports organization of many versions of software