

COHESION is a measure of a module's capability to represent a single function. If elements within a module are strongly related to each other for a specific purpose, this module is said to be highly cohesive.

TYPE OF COHESION	DESIRABILITY
Functional	High
Sequential	/ \
Communicational (data)	
Procedural	
Temporal	
Logical	\ /
Coincidental	Low

FUNCTIONAL COHESION: Occurs when each element of a module is essential to perform only one well-defined function. Modules with functional cohesion tend to be homogeneous - all parts of the module contribute materially to the task at hand. They tend to be easy to understand and, therefore, relatively easy to debug and maintain. They can generally be described in two or three words.

SEQUENTIAL COHESION: Modules that contain elements that must be performed in a designated sequence. Also when the output of one element is the input for the next. They are often unavoidable because of the nature of the programming tasks.

COMMUNICATIONAL (data related) COHESION: A module in which the statements in a module are all such that they make use of the same data structure or the same portion of a data structure.

PROCEDURAL COHESION: A module that relates strongly to the control structure of the program, i.e., defines a decision or an iteration process as the sole basis for procedure.

TEMPORAL COHESION: A module in which the statements take place within the same time span.

LOGICAL COHESION: A module that consists of a sequence of tasks related in some way but generally spanning several functional areas. Although the tasks performed by modules such as these are related in some fashion, they are less cohesive than other module types because they are composed of several more specific functions.

Full Functional Description for Module	Probable Type of Cohesion
Requires a simple, imperative sentence	Functional
Requires a compound sentence, or contains a comma, or contains more than one statement	Sequential, Logical or Communicational
Contains time-related words such as when, first, next, after, before, etc.	Sequential, Temporal,
Contains more than one object after the statement	Logical
Contains words such as initialize, clean-up	Temporal