

Chapter 1 Questions

A User-Defined tag:

- a. Can only contain one type of data.
- b. Can hold more than one type of data but only one of each.
- c. Can hold more than one type of data**
- d. Can contain multiple dimension array type tags

A project is:

- a. Not required in a CLX application
- b. The overall CLX application**
- c. Contained in the task in a CLX application
- d. Continuously executed
- e. Executed based on the method chosen: continuous, event, time-based.

There are two scopes for tags in CLX:

- a. Program and routine
- b. Project and task
- c. Task and program
- d. Internal and external
- e. None of the above.**

An array type tag can:

- a. Hold only one data type**
- b. Hold more than one data type
- c. Hold up to 100 values
- d. Only be used in continuous tasks

The watchdog timer for a task:

- a. Is preset at 500 ms and cannot be changed
- b. Watchdog timers are used with Programs, not Tasks
- c. Can be configured by the programmer**
- d. None of the above

Short answer

The lowest priority task execution type is: **(Continuous)**

Logic is written in: **(Routines)**

The three types of task execution are: **(Continuous, periodic, event based)**

True or False: Only one task can be continuous.

True or False: A routine is a set of logic instructions written in one programming language, such as ladder logic.

True or False: A routine in CLX is similar to the program or subprogram in most PLCs.

True or False: Routines are where the programmer writes the executable code for the project.

True or False: If any of the routines in the associated program produce a major fault, the controller executes the program fault routine, if one was developed.

True or **False**: More than one task can execute at a time.

True or False: For safety, it is assumed that something has gone wrong if a task takes too long to execute.

True or False: Every task has a watchdog timer that specifies how long a task can execute before it triggers a major fault.

True or False: If a task takes longer than the specified watchdog time, a major fault occurs.

True or **False**: A DINT-type tag is a decimal integer tag.

True or **False**: A Task is the file that stores the logic, configuration, data, and documentation for a controller.

True or False: A task could be defined as a scheduling mechanism for executing programs.

True or **False**: the three types of task execution are: continuous, scheduled, and fault-based.

True or **False**: When a new project is started, a periodic task is created by default.

True or False: Routines contain the logic in a CLX project.

True or False: If a task takes longer than the specified watchdog time, a major fault occurs.

True or **False**: Alias tags are not used in CLX because of the new tag addressing scheme used by CLX.

True or **False**: A user defined tag can only hold one type of data.

True or False: A structure-type tag can hold multiple types of data.

True or **False**: An array can hold multiple types of data.

True or False: Dint type tags can be used to hold integers.

True or **False**: BOOL type tags can be used to hold binary numbers up to 16 digits long.

True or **False**: REAL type tags are only used to hold actual I/O data from the real-world process.

True or False: Only one task is active at a time.

True or False: The lowest priority task is the continuous task.

True or **False**: Program scope tags are available to all programs in a project.

True or False: A task that is executing can be interrupted by another higher priority task.

True or False: Programs execute in the order in which they are displayed in the controller organizer under their task.

True or False: A project is the overall complete application.

True or False: A project is the file that stores the logic, configuration, data, and documentation for a controller.

True or False: An application can be broken into multiple logical tasks.

True or False: A task could be defined as a scheduling mechanism for executing programs.

True or False: A continuous task executes anytime a periodic or event-based task is not executing.

True or False: A tag is a user-friendly name for a memory location.

True or False: An array can have up to 3 dimensions.

True or **False**: When you add I/O modules to a project you must use the tag editor to create tags for the modules.

True or False: There are two scopes for tags in CLX: controller scope and program scope