

Name:

Date:

## CLAD Sample Exam 04

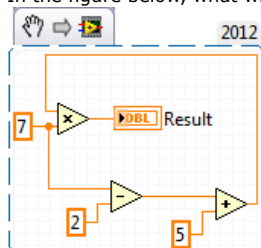
1. What VI is typically used to terminate an Error Cluster wire and to display any error message?

- A. Merge Errors
- B. One Button Dialog / Two Button Dialog
- C. Generate Front Panel Activity
- D. Simple Error Handler

2. Which of the following statements regarding Array constants is **NOT** true?

- A. All array operations can be performed on an Array constant.
- B. When you create an Array constant on the Block Diagram, it is not visible on the Front Panel.
- C. You cannot resize an Array constant to include more than one element.
- D. You can copy or drag an existing Array on the Front Panel to the Block Diagram to create a constant of the same data type.

3. In the figure below, what will **Result** equal when this calculation is executed?



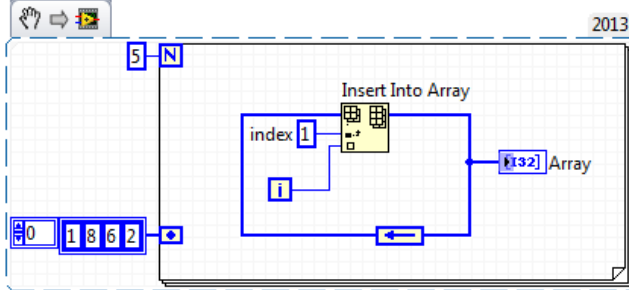
- A. 55
- B. 65
- C. 70
- D. Indeterminate

4. The function of a Cluster is to:

- A. Group mixed data types into logical structures.
- B. Present data on the Front Panel using Charts or Graphs.
- C. Provide a means of differentiating between data types on the Block Diagram.
- D. Separate data object by data type on the Front Panel.

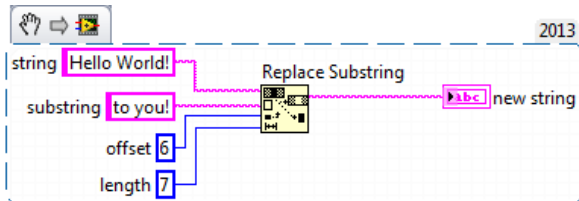
5. Can probes be attached to objects on the front panel?
- A. Yes
  - B. No

6. What is the result in **Array** after the following code has executed?



- A. A 1-D array of {1, 4, 3, 2, 1, 0}
- B. A 1-D array of {1, 8, 0, 1, 2, 3, 4, 6, 2}
- C. A 1-D array of {1, 4, 3, 2, 1, 0, 8, 6, 2}
- D. A 1-D array of {1, 8, 0, 1, 2, 2, 9}

7. What is the result in **new string** after the following code has executed?



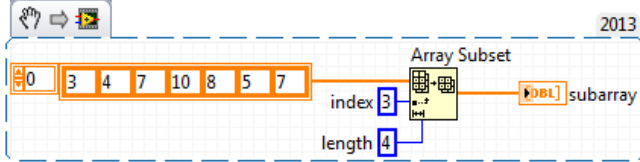
- A. Helloto you!
- B. Hello to you!!
- C. Hello Two you!
- D. Hello to you!

8. Which of the following display options are available for strings on the Front Panel?

- A. Hex
- B. Password
- C. '\ ' Codes

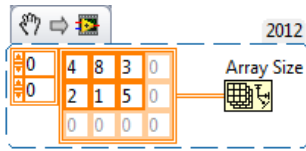
D. All of the above

9. What is the result in subarray after the following code has executed?



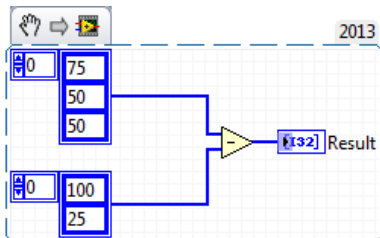
- A. A 1-D Array of {8, 5, 7}
- B. A 1-D Array of {10, 8, 5}
- C. A 1-D Array of {10, 8, 5, 7}
- D. A 1-D Array of {7, 10, 8, 5}

10. In the figure below, the output of **Array Size** is:



- A. 2
- B. 1D Array of {2, 3}
- C. 1D Array of {3, 2}
- D. None of the above.

11. What value is displayed in **Result** when the code executes?

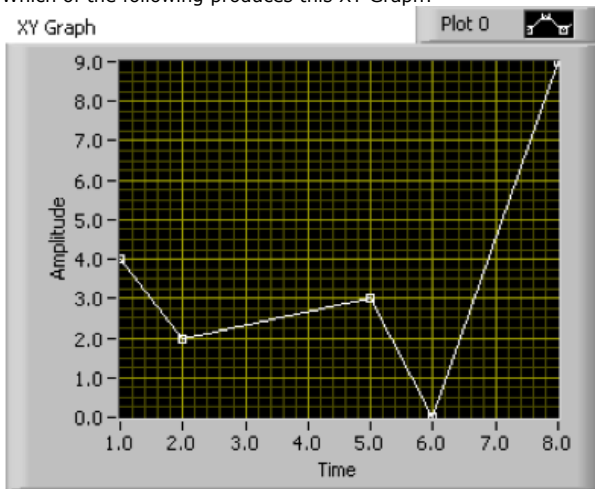


- A. A 1-D Array of {-25, 25, 50}
- B. A 1-D Array of {-25, 25}
- C. A 2-D Array of {{-25, -50, -50}, {50, 25, 25}}
- D. A 1-D Array of {75, -50, 25}

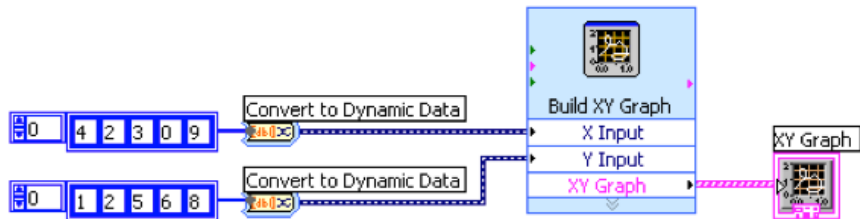
12. Which of the following allows you to plot any set of points, evenly distributed or not?

- A. Waveform Graph
- B. Waveform Chart
- C. XY Graph
- D. Both A and C

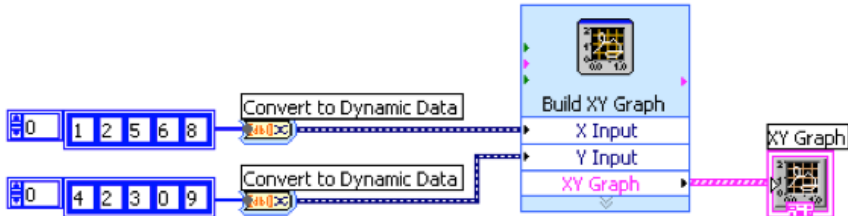
13. Which of the following produces this XY Graph?



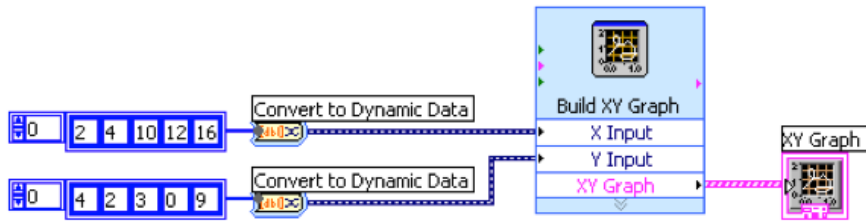
A.



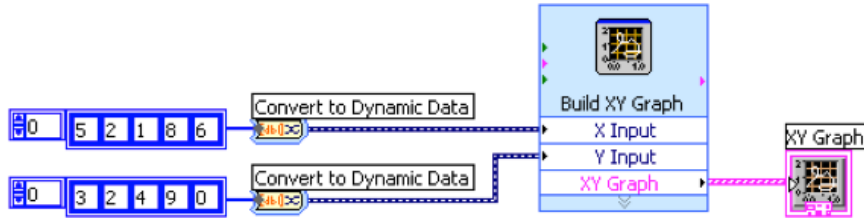
B.



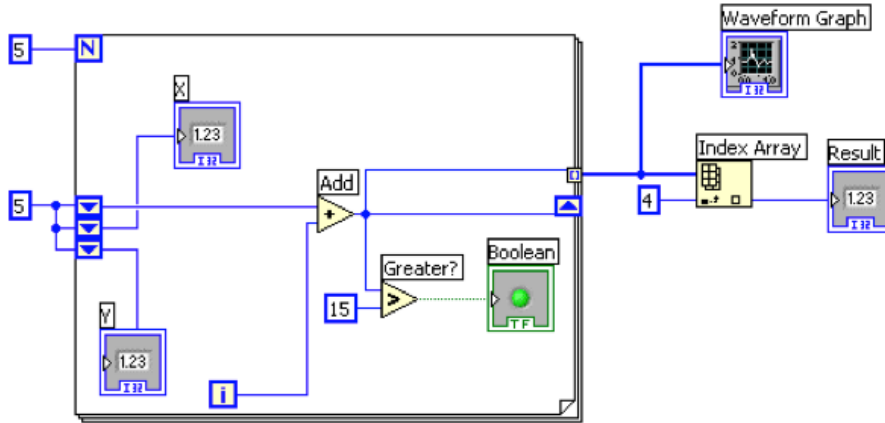
C.



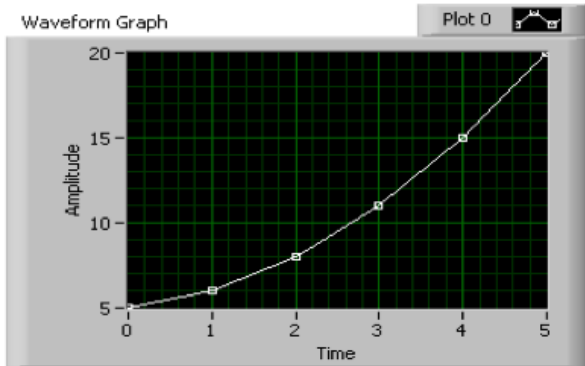
D.



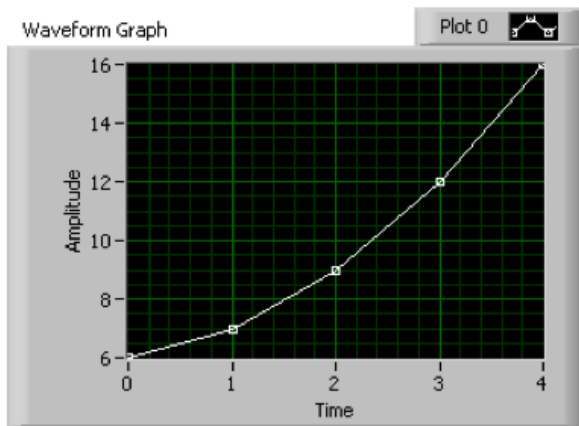
14. Which of the graphs below matches the output in the Waveform Graph indicator after the following code has executed?



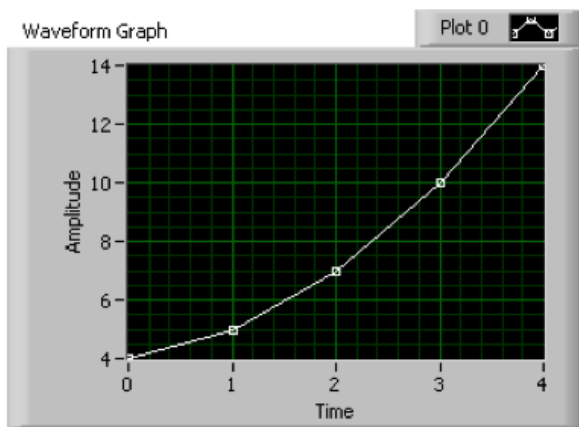
A.



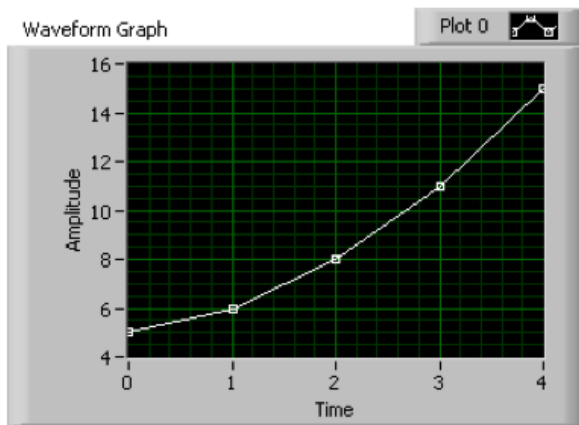
B.



C.



D.



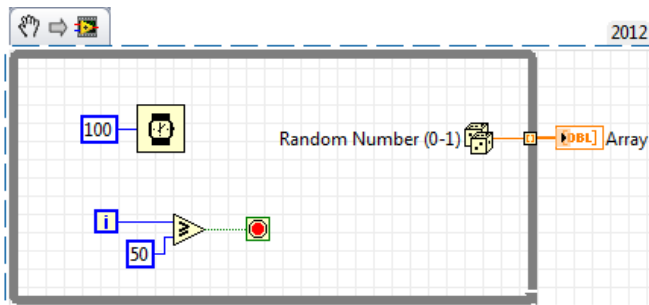
15. The Wait function can be added to While Loops...

- A. To allocate memory used by the CPU.
- B. To free up available memory.
- C. To reserve which processor the code is running on.
- D. To allow the processor time to complete other tasks.

16. Which of the following methods is **NOT** a method to create a 1-D Array?

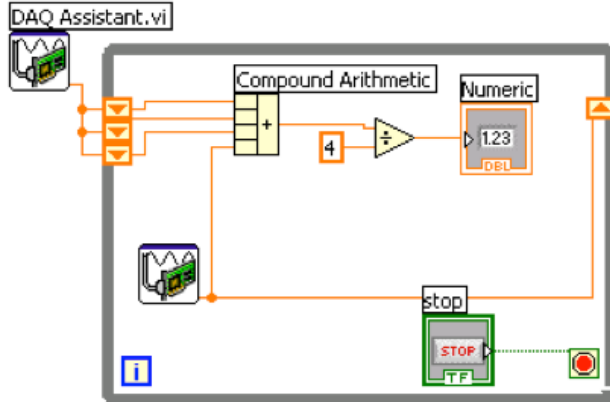
- A. Place an Array Shell on the Front Panel and drag a Control into the shell.
- B. Use a While Loop with auto-indexing disabled.
- C. Use a For Loop with auto-indexing enabled.
- D. Use the Initialize Array function.

17. Which of the following statements is **TRUE** regarding the execution of the following code?



- A. The loop will iterate 49 times.
- B. The loop will iterate 50 times.
- C. The loop will iterate 51 times.
- D. A For Loop that has a 50 wired to the count terminal will perform the same operation.

18. Which of the following accurately describes the output that results from execution of the following loop?



- A. The last three values from DAQ Assistant will be displayed.
- B. A running average of all measurements will be displayed.
- C. An average of the last four measurements will be displayed.
- D. None of the above.

19. Which of the following statements is **NOT** valid?

- A. You can make an Array of Arrays.
- B. You can make a Cluster of Clusters.
- C. You can make an Array of Clusters.
- D. You can make a Cluster of Arrays.

20. Which of the following statements is **TRUE**?

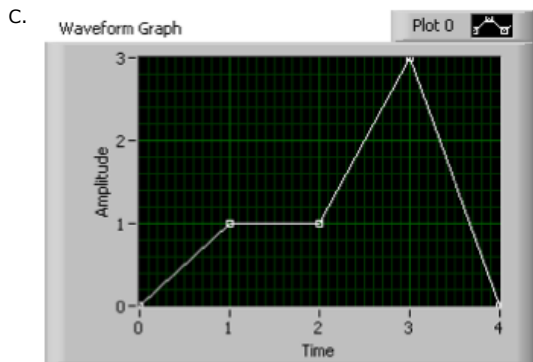
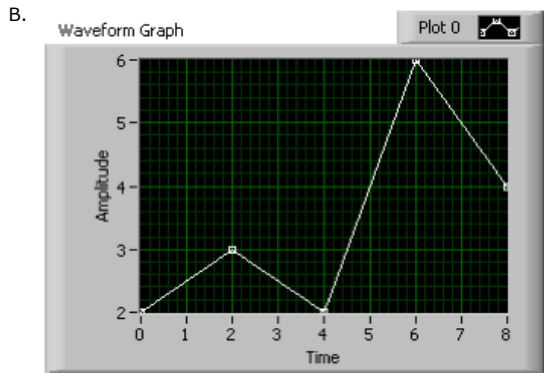
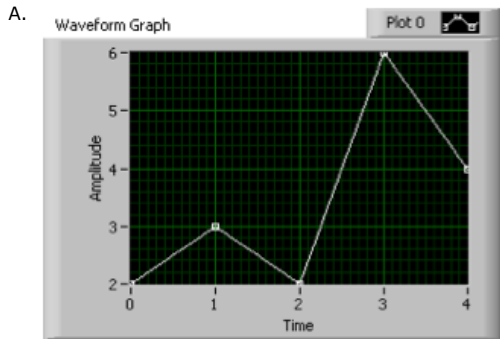
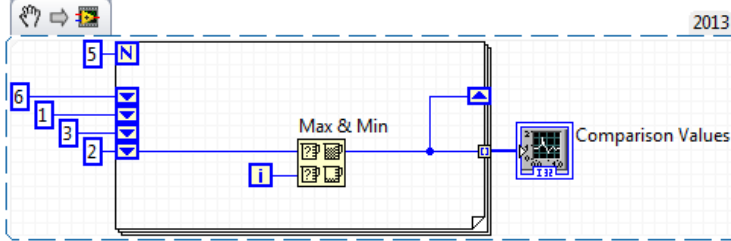
- A. The default setting for a tunnel into or out of a For Loop has auto-indexing enabled if the data being passed is an array.
- B. The default setting for a tunnel into or out of a While Loop has auto-indexing disabled if the data being passed is an array.
- C. Both A and B are True.
- D. None of the above.

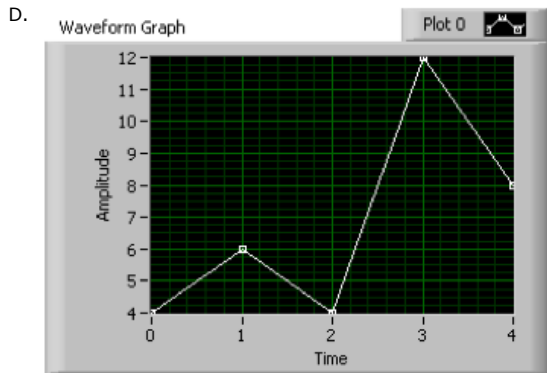
21. Which of the following statements is **TRUE** regarding the use of Coercion Dots?

- A. Coercion Dots improve program performance.
- B. Coercion Dots represent a conversion from one data type to another.
- C. Coercion Dots increase memory usage.
- D. Both A and B
- E. Both B and C



22. Which of the following graphs matches the result in Comparison Values after the following code has executed?





23. Which combination of words correctly completes the following statement?

Unlike \_\_\_\_\_, which display an entire waveform that overwrites the data already stored, \_\_\_\_\_ update periodically and maintain a history of the data previously stored.

- A. Graphs; Charts
- B. Charts; Plots
- C. Plots; Graphs
- D. Charts; Graphs

24. Which of the following will allow you to have multiple plots on a Waveform Graph?

- A. Bundle two 1D arrays of X and Y data together for each plot. Then build an array of these clusters and wire it to the Waveform Graph indicator.
- B. Build a 2D array of data with each plot in a separate row (or column) in the array, then wire the array to the Waveform Graph indicator.
- C. Bundle the elements of each waveform into a cluster and build an array of these clusters, then wire the array to the Waveform Graph indicator.
- D. Both B and C.

25. Which of the following is **NOT** a traditional debugging feature used to help find errors in a VI?

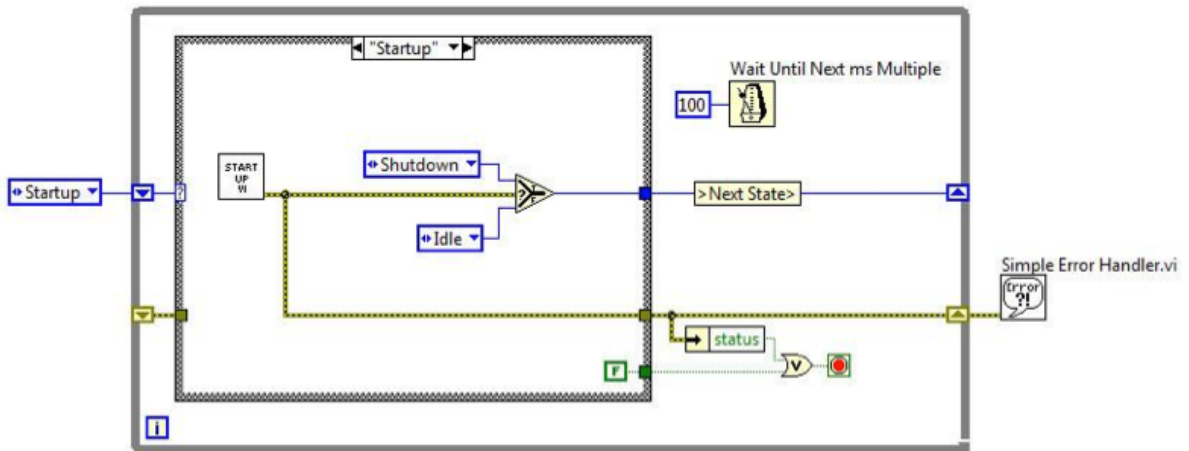
- A. Highlight Execution
- B. Single Stepping

- C. Breakpoints
- D. Stop Values

26. What VI is typically used to terminate an Error Cluster wire and to display any error message?

- A. Merge Errors
- B. Simple Error Handler
- C. Generate Front Panel Activity
- D. One Button Dialog / Two Button Dialog

27. The following block diagram represents which common type of VI architecture?



- A. Multiple Case Structure VI
- B. General VI
- C. State Machine VI
- D. Parallel Loop VI

28. Clicking on the \_\_\_\_\_ button allows you to bypass a node in the Block Diagram without single-stepping through the node.

- A. Step Into
- B. Step Over
- C. Step Out
- D. Step Through

29. Variants are used for all of the following except:

- A. Passing values between programs written with different compilers
- B. Allowing software to achieve a greater degree of generality
- C. Representing any data type
- D. Converting from fixed point to floating point data

30. You can use all of the following data types as inputs to the case selector terminal except:

- A. Doubles
- B. Enumerated type values
- C. Integers
- D. Strings

31. An Error List shows all of the following **EXCEPT**:

- A. Items with errors.
- B. Errors and Warnings
- C. Details about the warning.
- D. Error Codes.

32. The following breakpoint does which of the following?

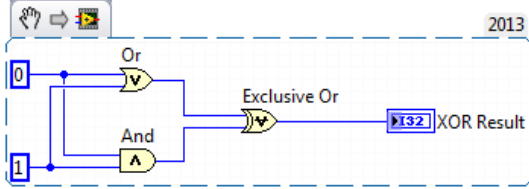


- A. Causes the VI to pause.
- B. Causes the VI to abort.
- C. Causes the VI to single step over the indicator.
- D. Causes the VI to single step over the addition.

33. Which of the following is **NOT** a component of an Error Cluster?

- A. Status
- B. Code
- C. Source
- D. VI Name

34. What is the value in **XOR Result** after the following code has executed?



- A. 0
- B. 1
- C. True
- D. False

35. Which of the following statements regarding the index of Arrays are **NOT** true?

- A. The index is used to access a particular element of an Array.
- B. The index ranges from 1 to N.
- C. A 2-D Array has both a column and row index.
- D. The index ranges from 0 to N-1.

36. Clusters provide a user with which of the following benefits?

- A. Clusters allow a logical grouping of related data elements.
- B. Clusters increase the number of Connector Pane terminals of subVIs.
- C. Clusters help to reduce wire clutter on the block diagram.
- D. Both A and C.





37. Which chart update mode plots new data from left to right, then clears the chart and plots the newer data ?

- A. Strip Chart
- B. Scope Chart
- C. Sweep Chart
- D. Step Chart

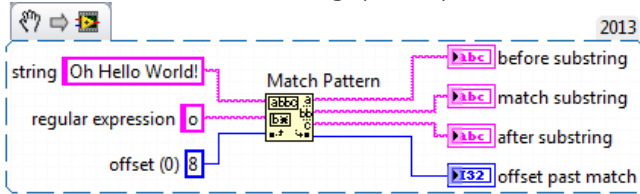
38. Which of the following methods will create an XY Graph with two plots?

- A. Create a single cluster from two arrays of X values and two arrays of Y values in an X,Y,X,Y pattern.
- B. Bundle the X and Y array pairs together into two clusters and then create an array of these two clusters.
- C. Bundle the X and Y array pairs together into two clusters and create a cluster of these two clusters.
- D. Create a single array of each of the X arrays and Y arrays in an X,Y,X,Y pattern.

39. Which of the following terminals controls how many times a For Loop will execute?

- A. 
- B. 
- C. 
- D. 

40. What is the value in **after substring** upon completion of the following code?



- A. world!
- B. rld!
- C. h hello world!
- D. <blank>