


# Activity # 6

## Chapter 2 – Written Activity

Score: 120 + 29 = **149**

  
 School of Computing and Information Technologies  
**PROGCON - CHAPTER 2**

(120)  
 copy: Allan

CLASS NUMBER: 22 SECTION: AC192  
 NAME: SARTE, CHARLIZE MAY DATE: NOV. 8, 2019

**PART 1: Identify the following.**

1. Data type A classification that describes what values can be assigned, how the variable is stored, and what types of operations can be performed with the variable. 20
2. Hierarchy Chart A diagram that illustrates modules' relationships to each other.
3. Data Dictionary A list of every variable name used in a program, along with its type, size, and description.
4. Functional Cohesion A measure of the degree to which all the module statements contribute to the same task.
5. Prompt A message that is displayed on a monitor to ask the user for a response and perhaps explain how that response should be formatted.
6. Portable A module that can more easily be reused in multiple programs.
7. Floating-point A number with decimal places.
8. Identifier A program component's name.
9. Numeric Constant A specific numeric value.
10. Declaration A statement that provides a data type and an identifier for a variable.
11. Hungarian notation A variable-naming convention in which a variable's data type or other information is stored as part of its name.
12. Integer A whole number.
13. Binary operator An operator that requires two operands—one on each side.
14. Magic number An unnamed constant whose purpose is not immediately apparent.
15. Assignment Statement Assigns a value from the right of an assignment operator to the variable or constant on the left of the assignment operator.
16. Alphanumeric label Can contain alphabetic characters, numbers, and punctuation.
17. Keywords Constitute the limited word set that is reserved in a language.
18. Module body Contains all the statements in the module.
19. Annotation Symbol Contains information that expands on what appears in another flowchart symbol; it is most often represented by a three-sided box that is connected to the step it references by a dashed line.
20. Self-documenting Contains meaningful data and module names that describe the program's purpose.

PROGCON – CH02 2<sup>nd</sup> TERM, AY2019-2020 MS. JEN

Right-associativity and Right-to-left associativity

21. Describe operators that evaluate the expression to the right first.

Numeric 22. Describes data that consists of numbers.

Left-to-right associativity 23. Describes operators that evaluate the expression to the left first.

Overhead 24. Describes the extra resources a task requires.

Order of operations 25. Describes the rules of precedence.

In scope 26. Describes the state of data that is visible.

Garbage 27. Describes the unknown value stored in an unassigned variable.

Local 28. Describes variables that are declared within the module that uses them.

Global 29. Describes variables that are known to an entire program.

Rules of precedence 30. Dictate the order in which operations in the same statement are carried out.

External documentation 31. Documentation that is outside a coded program.

Internal documentation 32. Documentation within a coded program.

Real numbers 33. Floating-point numbers.

End-of-job tasks 34. Hold the steps you take at the end of the program to finish the application.

Housekeeping tasks 35. Include steps you must perform at the beginning of a program to get ready for the rest of the program.

Detail loop tasks 36. Include the steps that are repeated for each set of input data.

Module header 37. Includes the module identifier and possibly other necessary identifying information.

Lower camel casing 38. Is another name for the camel casing naming convention.

Keobob case 39. Is sometimes used as the name for the style that uses dashes to separate parts of a name.

Module return statement 40. Marks the end of the module and identifies the point at which control returns to the program or module that called the module.

Numeric Variable 41. One that can hold digits, have mathematical operations performed on it, and usually can hold a decimal point and a sign indicating positive or negative.

Main program 42. Runs from start to stop and calls other modules.

Named constant 43. Similar to a variable, except that its value cannot change after the first assignment.

Modularization 44. Small program units that you can use together to make a program; programmers also refer to modules as subroutines, procedures, functions, or methods.

Initializing the variable 45. The act of assigning its first value, often at the same time the variable is created.

Encapsulation 46. The act of containing a task's instructions in a module.

Functional decomposition 47. The act of reducing a large program into more manageable modules.

Echoing input 48. The act of repeating input back to a user either in a subsequent prompt or in output.

Assignment operator 49. The equal sign; it is used to assign a value to the variable or constant on its left.

Reusability 50. The feature of modular programs that allows individual modules to be used in a variety of applications.



Reliability

51. The feature of modular programs that assures you a module has been tested and proven to function correctly.

Camel casing

52. The format for naming variables in which the initial letter is lowercase, multiple-word variable names are run together, and each new word within the variable name begins with an uppercase letter.

Pascal casing

53. The format for naming variables in which the initial letter is uppercase, multiple-word variable names are run together, and each new word within the variable name begins with an uppercase letter.

Mainline logic

54. The logic that appears in a program's main module; it calls other modules.

Lvalue

55. The memory address identifier to the left of an assignment operator.

Modularization

56. The process of breaking down a program into modules.

Abstraction

57. The process of paying attention to important properties while ignoring nonessential details.

Call a module

58. To use the module's name to invoke it, causing it to execute.

Program level

59. Where global variables are declared.

Program comments

60. Written explanations that are not part of the program logic but that serve as documentation for those reading the program.

Choose from the following

- |                              |                                 |   |
|------------------------------|---------------------------------|---|
| 1. Abstraction               | 22. Hierarchy chart             | 43. Modules   |
| 2. Alphanumeric values       | 23. Housekeeping tasks          | 44. Named constant                                      |
| 3. Annotation symbol         | 24. Hungarian notation          | 45. Numeric   |
| 4. Assignment operator       | 25. Identifier                  | 46. Numeric constant (literal numeric constant)         |
| 5. Assignment statement      | 26. In scope                    | 47. Numeric variable                                    |
| 6. Binary operator           | 27. Initializing the variable   | 48. Order of operations                                 |
| 7. Call a module             | 28. Integer                     | 49. Overhead  |
| 8. Camel casing              | 29. Internal documentation      | 50. Pascal casing                                       |
| 9. Data dictionary           | 30. Kebab case                  | 51. Portable  |
| 10. Data type                | 31. Keywords                    | 52. Program comments                                    |
| 11. Declaration              | 32. Left-to-right associativity | 53. Program level                                       |
| 12. Detail loop tasks        | 33. Local                       | 54. Prompt  |
| 13. Echoing input            | 34. Lower camel casing          | 55. Real numbers  |
| 14. Encapsulation            | 35. Lvalue                      | 56. Reliability   |
| 15. End-of-job tasks         | 36. Magic number                | 57. Reusability   |
| 16. External documentation   | 37. Main program                | 58. Right-associativity and right-to-left associativity |
| 17. Floating-point           | 38. Mainline logic              | 59. Rules of precedence                                 |
| 18. Functional cohesion      | 39. Modularization              | 60. Self-documenting                                    |
| 19. Functional decomposition | 40. Module body                 |   |
| 20. Garbage                  | 41. Module header               |   |
| 21. Global                   | 42. Module return statement     |   |

#22



School of Computing and Information Technologies

## PROGCON - CHAPTER 2

#22  
Score 29  
Checked by Niel

CLASS NUMBER: 22

SECTION: AC192

NAME: SARTE, CHARLIZE MAY

DATE: NOV-5, 2019

PART 2: Identify whether each variable name is valid, and if not explain why.

a) Age

3 Valid

b) age\_\*

5 not valid

→ In declaring variables, operations should not be included. (\*) is an operation for multiplication.

c) +age

5 not valid

→ the first character should be a letter or some certain characters.

d) age\_

0 not valid

→ Variable names should be ~~not~~ avoided ending in underscores which may result in conflict with names of variables automatically by commands and procedures.

e) \_age

3 Valid

f) Age

3 Valid

~~not~~ practical variable in java 😊

g) 1age

5 not valid

→ the first character of a variable must be a letter or one of the characters @, # or \$.

h) Age 1

5 not valid

→ the variable should have / must be one word, no spacing.