1. Reaction to the readings:
2. I was very confused through most of it. The pseudocode I understood, it was the C++ codes that were confusing. I like the diagrams. It made computations easier to understand because they were broken down into their own little place within the program.
3. Problems 1-8, 11, 12
4. If a data item is transmitted from a subprogram to the main program, it is said to be returned or EXPORTED to the main program
5. If a data item is transmitted from the main program to a subprogram, it is said to be passed to or IMPORTED by the subprogram.
6. A diagram that shows the data transmitted between programs modules is called a(n) DATA FLOW DIAGRAM
7. A chart that shows the data that is imported to, processed by and exported from each program is called a(n) IPO CHART.
8. The part of the program in which a given variable can be referenced is called the SCOPE of that variable.
9. The scope of a (n) GLOBAL variable is the whole program.
10. A (n) FUNCTION is a type of subprogram whose name may be assigned a value
11. A (n) BUILT-IN function is one that is supplied by the programming language; its code does not appear in the program that uses it.

11. FALSE: Changes to a value parameter is a subprogram affect the corresponding argument in the calling program?

12. TRUE: Changes to a reference parameter in a subprogram affect the corresponding argument in the calling module?

Short Answer

Main

 Set X =1

 Call Display (2 \* X, X, 5)

 End Program

Subprogram Display (Num1, Num2, Num3)

 Write Num1, “ “, Num2, “ “, Num3

 End Sub Program

13. What data is passed from the main program to the subprogram?

a. 2\*X , X, 5

14. What data is imported by the subprogram Display?

a. 2, 1, 5

15. Draw a data flow diagram for this program.

Set X= 1

2 \* X

X

5

Num1, Num2 & Num3

Num1, Num2 & Num3

16. Give an IPO Chart for the subprogram Display

|  |  |
| --- | --- |
| **VARIABLE** | **VALUE** |
| 2 \* X | 2 |
| X | 1 |
| 5 | 5 |

17. If the code corresponding to this pseudo code is run, what would the output of this program be?

a. 2, 1, 5