

Objectives: After completing this program you will be able to do the following:

1. Write a program header correctly using the style and format used in this class;
2. Write function headers correctly using the style and format used in this class;
3. Write preconditions and postconditions correctly in function headers;
4. Use the #include statement to add the iostream, string, fstream and iomanip libraries to a program;
5. Use the “using” clause in the statement “using namespace std; “.
6. Define and use function prototypes in a program;
7. Declare and use an ifstream object to read data from a file;
8. Pass parameters by value;
9. Pass parameters by reference
10. Declare and use a string object;
11. Use if and if/else statements to implement critical conditional statements in functions;
12. Implement mathematical statements in C++;
13. Use the magic formula to format output;
14. Use the manipulators setw, right, and left to format output;
15. Implement a main function;
16. Use the fail() stream function to determine if a file was opened correctly;
17. Use cout to print data to the screen;
18. Use the eof() stream function to determine when the end of file has been reached;
19. Use a while statement;
20. Call/invoke functions;