CISP 360: Problem Set #5

1. Why do local variables lose their values between calls to the function in which they are

defined?

7. What is the advantage of breaking your application’s code into several small procedures?

8. How would a static local variable be useful?

9. Give an example where passing an argument by reference would be useful.

33. The following statement calls a function named half . The half function returns a

value that is half that of the argument. Write the function.

result = half(number);

36. A program contains the following function.

void display(int arg1, double arg2, char arg3)

{

cout << "Here are the values: "

<< arg1 << " " << arg2 << " "

<< arg3 << endl;

}

Write a statement that calls the procedure and passes the following variables to it:

int age;

double income;

char initial;

37. Write a function named getNumber that uses a reference parameter variable to accept

an integer argument. The function should prompt the user to enter a number in the

range of 1 through 100. The input should be validated and stored in the parameter

variable.

Locate all the errors in the following functions:

58.

void area(int length = 30, int width)

{

return length \* width;

}

60. (Overloaded functions)

int getValue()

{

int inputValue;

cout << "Enter an integer: ";

cin >> inputValue;

return inputValue;

}

double getValue()

{

double inputValue;

cout << "Enter a floating-point number: ";

cin >> inputValue;

return inputValue;

}

A. Write a function prototype for a function that prompts the user to type a number, which is then returned as a result. The text of the prompt that the user sees is a function argument, but if that message is not provided the default message is **Enter a number:**