CMPS 2010 Homework 2

Fall 2024

Chapter 3

1. Why is it important to seed the random number generator before using the rand() function?
2. Explain how to use the pow() function and describe what it does.
3. The _____ file must be included in a program that uses the mathematical functions
4. The _____ file must be included in a program that uses the rand() function
5. Assume a string object has been defined as follows:

   `string description;`

   5.1. Write a basic cin statement that reads in a one-word string
   5.2. Write a statement that reads in a string that can contain multiple words separated by blanks
6. Write the final value for each of the following expressions:
   6.1. 26 / 4 - 2
   6.2. 8 + 14 * 2 - 10
   6.3. 10 + 8 * 0
   6.4. 6 + 6 % 5 - 6
   6.5. 15 / (10 - 3)
   6.6. (15 - 3) * (4 - 2) / 4
7. Use the combined assignment operators to shorten/simplify the following statements:
   7.1. y = y + 5;
   7.2. value = value * data;
   7.3. tilt = tilt / slope;
   7.4. stock = stock - loss;
8. Write a single line expression to generate a random number between 1 and 100.