Exam Review

GitHub

1. Write the commands to copy a project from GitHub to your computer. Assume you have now opened the project and have edited its contents. Write the next commands.

Clone the repository “Exam-Review” and run it to test your knowledge of definitions.

Questions

1. What are the differences between a character and a string?

2. What data type would you use for the following:
    1) 1000
    2) 1234567891011.50
    3) 2.2
    4) a
    5) abc

Evaluating Expressions

Assume x = 10, y = 7, and z = 2. Calculate the following:

1. x + z * y
2. x / z * x

3. x % y

4. x % z + 2

5. x < z && z < y

6. x > y || z < x

7. !(x < y)

8. !(z == y + x)

Programming Statements

1. Write the statement to display “Hello World”.

2. Write the statement to get user input for the string noun.

3. Print the following: My professor reminded us “don’t forget the semicolon”.

4. Write programming statements for the following:
    1) Ask the user to enter their age.
    2) Ask the user to enter their full name.

   Draw the input buffer after each line of code.

5. Write the programming statements for the following:

Food	Price
Coffee	$3.50
Bagel	$2.25
Donut	$1.50
Apple	$1.25

6. Draw diagrams and write statements to handle the following:
    a) If the temperature is 75 degrees or below, I will bring a jacket.
    If the temperature is above 75 degrees, I will wear shorts.

    b) If I study and do my homework I will pass the class.
    If I do not study and do not do my homework I will not pass the class.

Fix the Program Statements

1. int numerator, denominator;
   double answer;
   answer = numerator / denominator;

2. double price = 10.52563119345;
   std::cout << “Your total is $” << price << std::endl;

3. std::cout << “This program calculates the perimeter of a rectangle.\n”;
   std::cout << “Enter the length and width of a rectangle: “;
   int length, width, perimeter;
   std::cin >> length >> width;
   std::cout << “The perimeter is “ << perimeter << std::endl;
   perimeter = 2 * (length + width);

4. const int x, y, sum;
   std::cout << “Enter two numbers: “;
   std::cin << x << y
   x + y = sum;
   std::cout << “The sum is “ sum << std::endl;

5. if((x < 20) && (x > 50)) {
   std::cout << “Number out of bounds.” << std::endl;
   }

6. int number = 3;
   switch(number) {
   case (number=1):
   std::cout << “Answer is 1.”;
   case (number=2):
   std::cout << “Answer is 2.”; break;
   case (number=3):
   std::cout << “Answer is 3.”;
   }

What is the Output?

1. int x = 2, y = 5;
   std::cout << x << " " << y << std::endl;
   x *= y;
   std::cout << x << " " << y << std::endl;
   x += y;
   std::cout << x << std::endl; << y << std::endl;

Short Programs

1. Write a program to have the user enter in 3 test score. Calculate the average of the 3 test scores.

2. Write a program to have the user enter in a numerator and a denominator. Calculate the division. Handle any errors.