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Week 1 Exercises

12) Write C++ statements that accomplish the following:

a) Declare int variables x and y. Initialize x to 25 and y to 18.

int x, y;

x = 25;

y = 18;

b) Declare and initialize an int variable temp to 10 and a char variable ch to ‘A’.

int temp = 10;

char ch = ‘A’;

c) Update the value of an int variable x by adding 5 to it.

x += 5;

d) Declare and initialize a double variable payRate to 12.50.

double payRate = 12.50;

e) Copy the value of an int variable firstNum into an int variable tempNum.

tempNum = firstNum;

f) Swap the contents of the in variables x and y. (Declare additional variables, if necessary.)

int z;

z = x;

x = y;

y = z;

g) Suppose x and y are double variables. Output the contents of x, y, and the expression x + 12 /y -18.

cout << “x = “ << x << “y = “ << y << “x + 12 / y – 18 = “ << x + 12 / y -18 endl;

h) Declare a char variable grade and set the value of grade to ‘A’.

char grade;

grade = ‘A’;

i) Declare int variables to store four integers.

int a, b, c, d;

j) Copy the value of a double variable z to the nearest integer into an int variable x.

x = int(z);

14) Suppose x, y, z and w are int variables. What value is assigned to each of these variables after the last statement executes?

x = 5, y = 2, z = 3, w = 9

16) Suppose x, y, and z are int variables and x = 2, y = 5, and z = 6. What is the output of each of the following statements?

a) cout << “x = “ << x << ”, y = “ << y << “, z = << z << endl;

x = 2, y = 5, z = 6

b) cout << “x + y = “ << x + y , endl;

x + y = 7

c) cout << “Sum of “ << x << “ and “ << z << “ is “ << x + z << endl;

Sum of 2 and 6 is 8

d) cout << “z / x = “ << z / x << endl;

z / x = 3

e) cout << “2 times “ << x << “ = “ << 2 \* x << endl;

2 times 2 = 4

18) Write the C++ statements that accomplish the following.

a) Output the newline character.

cout << “//n”;

b) Output the tab character

cout << “//t”;

c) Output double quotation mark.

cout << “//””;

20) Give meaningful identifiers for the following variables.

a) A variable to store the first name of a student.

firstNameStudent

b) A variable to store the discounted price of an item.

discountPrice

c) A variable to store the number of juice bottles.

noOfJuiceBottles

d) A variable to store the number of miles traveled

noOfMilesTraveled

e) A variable to store the highest test score.

testScoreHighest