CORPORATE SALES DATA EXAMPLE USING STRUCTURE

Write a program that uses a structure named `CorpData` to store the following information on a company division:

Division name (such as East, West, North, or South)
First quarter sales
Second quarter sales
Third quarter sales
Fourth quarter sales

Include a constructor that allows the division name and four quarterly sales amounts to be specified at the time a `CorpData` variable is created.

The program should create four `CorpData` variables, each representing one of the following corporate divisions: East, West, North, and South. These variables should be passed one at a time, as constant references, to a function that computes the division's annual sales total and quarterly average, and displays these along with the division name.

```
// This program stores and displays corporate sales data. The data
// is stored in structures which are passed to a function that
// displays the data.
#include <iostream>
#include <iomanip>
#include <string>
using namespace std;

struct CorpData
{
      string name;     // Division name
      long qtr1;       // Holds a division's sales data for each of 4
quarters
      long qtr2;
      long qtr3;
      long qtr4;

      // Cconstructor with 5 parameters and default values specified
      // for when no arguments, or fewer than 5 arguments, are received
      CorpData(string n = " ", long q1 = 0, long q2 = 0,
                                 long q3 = 0, long q4 = 0)
      {     name = n;
            qtr1 = q1;
            qtr2 = q2;
            qtr3 = q3;
            qtr4 = q4;
      }
};

// Function prototype
void displaySalesInfo(const CorpData &);

int main()
```

```
{
      // Define and initialize 4 CorpData structures
      CorpData east ("East ", 621900, 620400, 611900, 634500),
                west ("West ", 531000, 538000, 549200, 588100),
                  north("North", 482900, 477500, 479200, 489600),
                  south("South", 658900, 644900, 653000, 660100);

      cout << " Annual Sales Report by Division \n\n";
      cout << "Division     Annual       Avg. Qtr. \n";
      cout << "  Name        Sales         Sales   \n";
      cout << "---------------------------------- \n";

      displaySalesInfo(east);
      displaySalesInfo(west);
      displaySalesInfo(north);
      displaySalesInfo(south);

      return 0;
}// end main function

/*********************************************************
 *                displaySalesInfo                       *
 * This function displays the annual sales and average    *
 * quarterly sales for the CorpData structure variable    *
 * passed to it.                                          *
 *********************************************************/
void displaySalesInfo(const CorpData &div)
{
      double annualSales = div.qtr1 + div.qtr2 + div.qtr3 + div.qtr4;
      double avgQtrSales = annualSales / 4;

      cout << div.name << "    $" << setw(9) << annualSales
                     << "    $" << setw(9) << avgQtrSales << endl;

}// end displaySalesInfo function

/* OUTPUT PRODUCED BY THIS PROGRAM

Annual Sales Report by Division

Division     Annual       Avg. Qtr.
  Name        Sales         Sales
-----------------------------------
East     $2.4887e+006    $   622175
West     $2.2063e+006    $   551575
North    $1.9292e+006    $   482300
South    $2.6169e+006    $   654225
*/
```