

Programming 1

Program #4—paint.cpp

Objectives

Students who successfully complete this program will be able to:

- Use simple Boolean expressions and variables
- Use an if statement

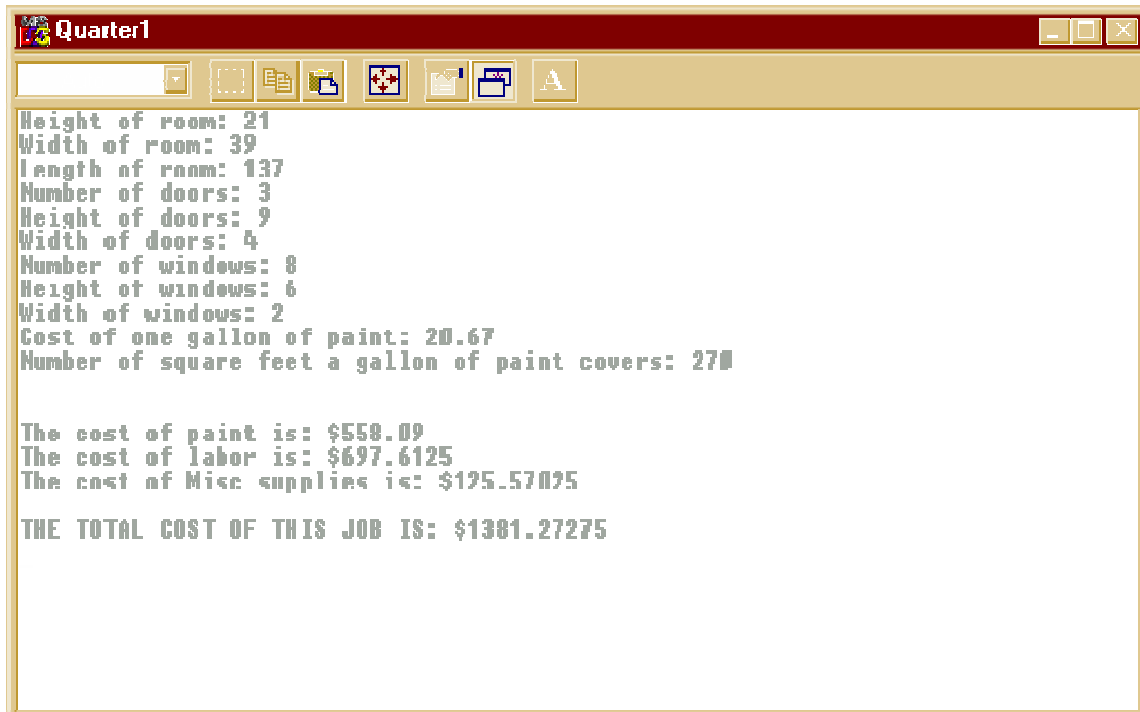
Directions

The paint program calculates the cost of painting a room. In this program, the computer asks the user for the following information (measurement should be entered in feet):

Height of the room:
Width of the room:
Length of the room:
Cost of one gallon of paint:
Number of square feet a gallon of paint covers:
Number of doors:
Height of doors:
Width of doors:
Number of Windows:
Height of Windows:
Width of Windows:

The computer calculates the cost of paint. At this point you will need to check the number of gallons of paint. Let's assume that our store does not sell paint by anything other than a gallon. If this is the case and you calculate that you will need any amount of paint other than a whole number (ie. 20.3 gallons) you will need to write the code to round the paint up to the next whole number. The computer then calculates the cost of labor at 125% of the total cost of paint. The computer then calculates the cost of miscellaneous supplies at 10% of the total cost of labor and paint.

The computer prints out the cost of paint, cost of labor, and cost of miscellaneous and total cost.



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Quarter1
Height of room: 21
Width of room: 39
Length of room: 137
Number of doors: 3
Height of doors: 9
Width of doors: 4
Number of windows: 8
Height of windows: 6
Width of windows: 2
Cost of one gallon of paint: 20.67
Number of square feet a gallon of paint covers: 270

The cost of paint is: $558.09
The cost of labor is: $697.6125
The cost of Misc supplies is: $195.57025

THE TOTAL COST OF THIS JOB IS: $1381.27275
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