Justin Patera
COP 2000
Thursday Evening
Assignment 1

Problem Statement

Program will send a message to the screen to greet user and introduce itself and ask the user for the length of the room, then store that number in storage location named L. It then asks for the width, storing that number in a location named W. Finally the program will ask for the price of the carpet in square yards, it will then divide that amount by 9, storing that in a location named P. All user inputs will be able to use two decimal places if necessary. The program will then multiply the length by the width and store this number in location SQFT. The program will then multiply the value in SQFT by the value in P, storing this value in a location named TotalCost. The program will display a message on screen stating that the total square footage of the room, and what the cost to carpet the room would be, rounded to two decimals. The program will lastly thank the user and display the program credits.

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Sample Softcopy

This is Justins awesome carpet room calculator! [Insert Disclaimer]. [Insert License]. [Blah Blah Blah]. Have the length and width of the room you want to carpet, along with the price of the carpet you want to use available.

Enter the length in feet: [12]
Enter the width in feet: [15]
Enter the price of the carpet (in square yards): [2.50]

The cost of carpeting a 12 by 15 room would be $50,
and will take 20 square yards of carpet.

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Variable Lists

Symbolic Constant List:

Identifier	Description	Data Type	Value	Use	Destination
SFPERSY	Square Feet per Square Yard	Int	9	Used for P	N/A

Variable List

Identifier	Description	Data Type	Source	Use	Destination
L	Length of Room	Int	From Keyboard	For SQFT	N\A
W	Width of Room	Int	From Keyboard	For SQFT	N\A
P	Price of Carpet	Double	From Keyboard	For TotalCost	N\A
SQFT	Square footage of room	Float	Calculated	For TotalCost	Screen
TotalCost	Final cost	Double	Calculated	N\A	Screen

Justins awesome carpet room calculator - pseudocode

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START

print "This is Justins awesome carpet room calculator!  [Insert
Disclaimer].  [Insert License].  [Blah Blah Blah].  Have the length and
width of the room you want to carpet, along with the price of the
carpet you want to use available."<CR><CR>

print "Enter the length in feet: "
length = gets
print "Enter the width in feet: "
width = gets
print "Enter the price of the carpet (in square yards): "
price = gets

size = length * width
price = price / 9
total = size * price

print "The cost of carpeting a #{length} by #{width} room would be
$#{total}, and will take #{size / 9} square yards of carpet."
```

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Data tracing chart

	L	W	P	SQFT	TotalCost
C2	10				
C5		20			
C8			18 / 9 = 2		
D2				200	
D3					400

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Test output

This is Justins awesome carpet room calculator! [Insert Disclaimer]. [Insert License]. [Blah Blah Blah]. Have the length and width of the room you want to carpet, along with the price of the carpet you want to use available.<CR>

<CR>

Enter the length in feet: [12]<CR>
Enter the width in feet: [15]<CR>
Enter the price of the carpet (in square yards): [2.50]<CR>

<CR>

The cost of carpeting a 12 by 15 room would be $50,<CR>
and will take 20 square yards of carpet.<CR>