Doug Strouth

Assignment 4  
C++  
  
Questions

1. (3<4) && (5>7) would be represented by the Boolean value false and represented internally as 0.
2. The way to make a<b && c<d evaluate to false, since it would currently evaluate to true, could be done in three ways. !(a<b&&c<d), !(a<b)&&c<d, or a<b&& !(c<d) would all evaluate to false.
3. Braces are needed when creating branching statements that have a part that must execute more than one statement. For instance if an if statement must perform more than operation if evaluating true than those operations would be enclosed in braces. Example:

if (cost>balance)

{

cout<<”That costs too much”<<endl ;

cout<<”Why do you want to spend that much?<<endl;

}

else

cout << “You have plenty of money to buy that!”<<endl;

Program Code:

#include <iostream>

using namespace std;

int area (int length, int width)

{ int area;

area =length\*width;

return area;

}

int perimeter (int length, int width)

{ int perimeter;

perimeter=(2\*length)+(2\*width);

return perimeter;

}

int main ()

{

int length, width;

cout<<"Enter the length and then width:"<<endl;

cin >> length>>width;

if (width<0||length<0)

cout<<"Please make sure your measurements aren't negative!";

else

{cout<<"The area of the rectangle is "<<area(length,width)<<endl;

cout<<"The perimeter of the rectangle is "<<perimeter(length,width)<<endl;

}

return 0;

}