Rectangle.h

#ifndef RECTANGLE\_H

#define RECTANGLE\_H

class Rectangle

{

public:

Rectangle();

Rectangle(double w, double h);

double getWidth() const;

double getHeight() const;

double changeWidth(double x);

double changeHeight(double x);

double getArea();

double getPerimeter();

private:

double width;

double height;

};

#endif

Rectangle.cpp

#include <iostream>

#include "Rectangle.h"

using namespace std;

Rectangle::Rectangle() { width = 1; height = 1; }

Rectangle::Rectangle(double w, double h) { width = w; height = h; }

double Rectangle::getWidth() const

{

return width;

}

double Rectangle::getHeight() const

{

return height;

}

double Rectangle::changeWidth(double x)

{

return width + x;

}

double Rectangle::changeHeight(double x)

{

return height + x;

}

double Rectangle::getArea()

{

return width \* height;

}

double Rectangle::getPerimeter()

{

return 2 \* (width + height);

}

Main.cpp

#include <iostream>

#include "Rectangle.h"

using namespace std;

int main()

{

double w1, h1, w2, h2;

cout << "Enter the first rectangle's width: " << endl;

cin >> w1;

cout << "Enter the first rectangle's height: " << endl;

cin >> h1;

cout << "Enter the second rectangle's width: " << endl;

cin >> w2;

cout << "Enter the first rectangle's height: " << endl;

cin >> h2;

Rectangle rec1(w1, h1);

Rectangle rec2(w2, h2);

cout << "First rectangle's width is " << rec1.getWidth() << endl;

cout << "First rectangle's height is " << rec1.getHeight() << endl;

cout << "First rectangle's area is " << rec1.getArea() << endl;

cout << "First rectangle's perimeter is " << rec1.getPerimeter() << endl;

cout << "--------------------------------------\n";

cout << "Second rectangle's width is " << rec2.getWidth() << endl;

cout << "Second rectangle's height is " << rec2.getHeight() << endl;

cout << "Second rectangle's area is " << rec2.getArea() << endl;

cout << "Second rectangle's perimeter is " << rec2.getPerimeter() << endl;

return 0;

}

A picture containing text, monitor, screenshot, computer

Description automatically generated

Demonstrated at 11:07 am on Tuesday August 31st 2021