// ConsoleApplication1.cpp : This file contains the 'main' function. Program execution begins and ends there.

//

#include <iostream> <cmat.h>

#include "Rectangle.h"

using namespace std;

void cel() {

float C;

float F;

cout << "type in the temparature in Celsius: ";

cin >> C;

F = 32 + (C \* ((float)9 / 5));

cout << "the temparature in Fahrenheit is " << F << endl;

}

void feh() {

float C;

float F;

cout << "type in the temparature in Fahrenheit: ";

cin >> F;

C = (F - 32) \* ((float)5 / 9);

cout << "the temparature in Celsius is " << C << endl;

}

int main()

{

// Question 1:

string x;

string y;

cout << "Please type in your First name then press enter : ";

cin >> x;

cout << "Please type in your Last name then press enter : ";

cin >> y;

cout << x << " " << y << " " << endl;

//Question 1 solved

// Question 2:

float w;

float h;

float b;

float e;

cout << "Please type in your weight in kilogrmas then press enter : ";

cin >> w;

cout << "Please type in your height in centimeters then press enter : ";

cin >> h;

e = (h / 100);

b = (w) / pow(e, 2);

if (20 < b && b< 25)

{

cout << "Your BMI is in the Normal Range ";

};

if (20 > b )

{

cout << "Your BMI is in the under-weight Range ";

};

if ( b > 25)

{

cout << "Your BMI is in the over-weight Range ";

};

cout << b << endl;

// Question 2 solved

// Question 3:

int n;

long double f = 1.0;

cout << "enter a pozitive integer: ";

cin >> n;

if (n < 0)

cout << "error, negative number was entered";

else {

for (int i = 1; i <= n; ++i) {

f \*= i;

}

cout << "factorial equals to: " << f << endl;

}

// Question 3 solved

// Question 4

cout << "please select one of the following options by typing in the corresponding number:" << endl;

int p;

cout << "1) Celsius to Fahrenheit" << endl << "2) Fahrenheit to Celsius" << endl;

cin >> p;

if (p == 1) {

cel();

}

if (p == 2) {

feh();

}

// Question 4 solved

//Question 5

Rectangle Rect1 = Rectangle(5, 4);

Rectangle Rect2;

Rectangle Rect3;

Rect2.setLength(7);

Rect2.setWidth(5);

Rect3 = Rect1;

cout << "Rect1 Area: " << Rect1.getArea() << endl;

cout << "Rect1 Perimeter: " << Rect1.getPeri() << endl;

cout << "Rect2 Area: " << Rect2.getArea() << endl;

cout << "Rect2 Perimeter: " << Rect2.getPeri() << endl;

cout << "Rect3 Area: " << Rect3.getArea() << endl;

cout << "Rect3 Perimeter: " << Rect3.getPeri() << endl;

}

