Inheritance & Virtual Function



Problem Statement

A virtual function is a member function that you expect to be redefined in derived classes. An example of virtual function:

```
class B
{
  public:
    void display(){}
};

class D : public B
{
  public:
    void display(){}
};
```

Krish just finished reading about rectangles, and he has learned how to compute the area of a rectangle. However, he doesn't know whether his answer is correct.

He needs your help! Write a class that computes the area of a rectangle.

Create two classes: "Rectangle" and "RectangleArea" with the following specifications:

class1: **Rectangle**Member1: **width**Member2: **height**

Method1: **Display()** //to display the dimensions of rectangle.

class2: **RectangleArea** //derived from class Rectangle.

Method1: **Input()** //to read the width and height of a rectangle.

Method2: **Display()** //virtual function to display the area of rectangle.

Input Format

The first and only line of input contains two space separated integers denoting the width and height of the rectangle.

Constraints

1<=width<=100. 1<=height<=100.

Output Format

In the first line, print the width and height of the rectangle with a single space in between. In the next line, print the area of the rectangle.

Sample Input

105

Sample Output

Explanation

Area of rectangle is calculated as: width*height = 10*5 = 50.