You found two items in a treasure chest! The first item weights weight1 and is worth value1, and the second item weights weight2 and is worthvalue2. What is the total value of the items you can take with you, assuming that your max weight capacity is maxW and you can't come back for the items later?

**Example**

* For value1 = 10, weight1 = 5, value2 = 6,weight2 = 4 and maxW = 8, the output should be  
  knapsackLight(value1, weight1, value2, weight2, maxW) = 10.

You can only carry the first item.

* For value1 = 10, weight1 = 5, value2 = 6,weight2 = 4 and maxW = 9, the output should be  
  knapsackLight(value1, weight1, value2, weight2, maxW) = 16.

You're strong enough to take both of the items with you.

**Input/Output**

* **[time limit] 3000ms (cs)**
* **[input] integer value1**

*Constraints:*  
2 ≤ value1 ≤ 20.

* **[input] integer weight1**

*Constraints:*  
2 ≤ weight1 ≤ 5.

* **[input] integer value2**

*Constraints:*  
2 ≤ value2 ≤ 20.

* **[input] integer weight2**

*Constraints:*  
2 ≤ weight2 ≤ 5.

* **[input] integer maxW**

*Constraints:*  
1 ≤ maxW ≤ 20.

* **[output] integer**

<https://codefights.com/arcade/code-arcade/at-the-crossroads/r9azLYp2BDZPyzaG2>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static int knapsackLight(int value1, int weight1, int value2, int weight2, int maxW)

{

if (weight1 + weight2 <= maxW)

{

return value1 + value2;

}

else if (weight1 <= maxW && weight2 <= maxW)

{

return Math.Max(value1, value2);

}

else if (weight1 <= maxW)

{

return value1;

}

else if (weight2 <= maxW)

{

return value2;

}

return 0;

}

static void Main(string[] args)

{

//int value1 = 10, weight1 = 5, value2 = 6, weight2 = 4, maxW = 8;

//Console.WriteLine(knapsackLight(value1, weight1, value2, weight2, maxW));

//int value1= 10;

//int weight1= 2;

//int value2 =11;

//int weight2 = 3;

//int maxW = 1;

//Console.WriteLine(knapsackLight(value1, weight1, value2, weight2, maxW));

int value1= 2;

int weight1= 5;

int value2 = 3;

int weight2 = 4;

int maxW = 5;

Console.WriteLine(knapsackLight(value1, weight1, value2, weight2, maxW));

Console.ReadLine();

}

}

}