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Practice problems aimed to improve your coding skills.

-  PRACTICE-02_SCAN-PRINT
-  PRACTICE-03_TYPES
-  LAB-PRAC-02_SCAN-PRINT
-  LAB-PRAC-01
-  PRACTICE-04_COND
-  BONUS-PRAC-02
-  LAB-PRAC-03_TYPES
-  PRACTICE-05_COND-LOOPS
-  LAB-PRAC-04_COND
-  LAB-PRAC-05_CONDDLOOPS
-  PRACTICE-07_LOOPS-ARR
-  LAB-PRAC-06_LOOPS
-  LAB-PRAC-07_LOOPS-ARR
-  LABEXAM-PRAC-01_MIDSEM
-  PRACTICE-09_PTR-MAT
-  LAB-PRAC-08_ARR-STR
 -  Il fratello di Fibonacci
 -  Hidden Palindrome
 -  Hush Hush Hash
 -  Maximum Match
 -  El secreto de sus l
 -  Star Replacement
 -  Stronger together
 -  Rigorous and repeated redaction
 -  strnrev
 -  Monster and Mini Multiply
 -  Clash of the Substrings
 -  Personalizing Emails
-  PRACTICE-10_MAT-FUN
-  LAB-PRAC-09_PTR-MAT
-  LAB-PRAC-10_MAT-FUN
-  PRACTICE-11_FUN-PTR
-  LAB-PRAC-11_FUN-PTR
-  LAB-PRAC-12_FUN-STRUC
-  LABEXAM-PRAC-02_ENDSEM
-  LAB-PRAC-13_STRUC-NUM
-  LAB-PRAC-14_SORT-MISC

Maximum Match

LAB-PRAC-08_ARR-STR

Maximum Match [10 marks]
-----**Problem Statement**

In the first line of the input, you will be given two integers n and k . We assure you that n will be strictly positive but less than or equal to 1000. In the second line of the input, you will be given n integers sorted in non-decreasing order, with integers separated by a single space. You need to find out if there are any two distinct elements in the list such that the sum of the two elements is equal to k .

Your output should be in two lines.

1. Case 1: there are no two numbers in the list that sum to k . In this case, in the first line, print the words "No Match" (without quotes).
2. Case 2: there are exactly two numbers in the list of numbers that sum to k . In this case, in the first line, output the two numbers, which sum up to k . The two numbers should be printed in increasing order, separated by a single space. In the second line, print the locations at which these numbers occur in the list. The locations should be printed separated by a single space.
3. Case 3: there are more than one pair of numbers in the list that sum to k . In this case, choose the pair whose sum of locations is the maximum (an illustrative example is given below) and output the numbers and their locations as directed in Case 2 above.

Caution

1. When printing locations, use the human convention where the first location in the list is 1 (not the array index convention where locations begin with 0).
2. For the purposes of this question, two numbers in the list are distinct if they occur at distinct locations, even if they share the same value. Thus, the list 1 1 2 3 4 consists of two distinct elements of value 1.
3. Be careful about extra/missing lines and extra/missing spaces in your output.

HINT: You may want to use an array to store the list of numbers

EXAMPLE 1:

INPUT

8 11

1 2 3 8 8 8 10 11

OUTPUT:

3 8

3 6

Explanation: although the pairs (3,8) (note that 8 occurs thrice in the list) and (1,10) both add up to 11, the pair (3,8) occurs at the locations (3,6) in the list whereas (1,10) occurs at locations (1,7) since $3+6 > 1+7$, we chose the pair (3,8).

EXAMPLE 2:

INPUT

6 10

1 2 3 4 5 21

OUTPUT:

No Match

Explanation: no two distinct numbers in the list add up to 10.
-----**Grading Scheme:**Total marks: **[10 Points]**

There will be no partial grading in this question. An exact match will receive full marks whereas an incomplete match will receive 0 points. Please be careful of missing/extra spaces and missing/lines (take help of visible test cases). Each visible test case is worth 1 point and each hidden test case is worth 2 points. There are 2 visible and 4 hidden test cases.

 **Start Solving! (/editor/practice/6166)**