

2h 0m left

2. Efficient Shipping

A warehouse manager needs to create a shipment to fill a truck. All of the products in the warehouse are in boxes of the same size. Each product is packed in some number of units per box. Given the number of boxes the truck can hold, determine the maximum number of units of any mix of products that can be shipped.

Example
boxes = [1, 2, 3]
unitsPerBox = [3, 2, 1]
truckSize = 3

The maximum number of units that can be shipped is $3 + 2 + 2 = 7$ units.

Product 0
1 box with
3 units

3

Product 1
2 boxes with
2 units each

22

Product 2
3 boxes with
1 unit each

111

InfoC#Autocomplete Ready

```
29 private static long maxvalue=long.MinValue;
30 public static long getMaxUnits(List<long> boxes, List<long> unitsPerBox, long truckSize)
31 {
32     long capt=0;
33     int j;
34     int boxsize=boxes.Count() ;
35     long endingmaxvalue = 0;
36     for(j=0; j<boxsize; j++)
37     {
38         capt += boxes[j];
39         if(capt <= truckSize)
40         {
41             endingmaxvalue+=boxes[j]*unitsPerBox[j];
42             if(maxvalue<endingmaxvalue)
43             {
44                 maxvalue=endingmaxvalue;
45             }
46         }
47     }
48     return maxvalue;
49 }
```

Line: 29 Col: 40

Test ResultsCustom InputRun CodeRun TestsSubmit

Compiled successfully. All available test cases passed

Test case 0

Input (stdin)

Run as Custom Input | Download

Test case 1

11

45m left

BETA

Can't read the text? [Switch theme](#)

1. Frequency Sort

ALL

Given an array of n item values, sort the array in ascending order, first by the frequency of each value, then by the values themselves.

1

Example

$n = 6$
 $items = [4, 5, 6, 5, 4, 3]$

- There are 2 values that occur once: $[3, 6]$.
- There are 2 values that occur twice: $[4, 4, 5, 5]$.
- The array of items sorted by frequency and then by value in ascending order is $[3, 6, 4, 4, 5, 5]$

Function Description

Complete the function `itemsSort` in the editor below.

itemsSort has the following parameter(s):
`int items[n]`: the array to sort

Returns

`int[n]`: the sorted array

InfoC#Autocomplete Ready

```
22  * The function is expected to return an INTEGER_ARRAY.
23  * The function accepts INTEGER_ARRAY items as parameter.
24  */
25
26  public static List<int> itemsSort(List<int> items)
27  {
28      var result = items.GroupBy(n=>n).OrderBy(g=>g.Count()).ThenBy(g=>g.Key).SelectMany(g=>g);
29      return result.ToList();
30  }
31
32  }
33  > class Solution ...
```

Line: 16 Col: 1

Test Results

Custom Input

Run CodeRun TestsSubmit

Compiled successfully. All available test cases passed

Test case 7

Test case 8

Test case 9

Test case 10

Test case 11

Input (stdin)

Run as Custom Input | Download

1	5
2	3
3	1
4	2
5	2
6	4

BETA Can't read the text? [Switch theme](#)

4. Group Division

A university has admitted a group of n students with varying skill levels. To better accommodate the students, the university has decided to create classes tailored to the skill levels. A placement examination will return a skill level that will be used to group the students, where $levels[i]$ represents the skill level of student i . All students within a group must have a skill level within $maxSpread$, a specified range of one another. Determine the minimum number of classes that must be formed.

Example

$n = 5$
 $levels = [1, 4, 7, 3, 4]$
 $maxSpread = 2$

The students in any group must be within $maxSpread = 2$ levels of each other. In this case, one optimal grouping is (1, 3), (4, 4), and (7). Another possible grouping is (1), (3, 4, 4), (7). There is no way to form fewer than 3 groups.

Function Description

Complete the function `groupDivision` in the editor below.

`groupDivision` has the following parameter(s):
`int levels[n]`: the skill level for each student

Info C# Autocomplete Ready

```
1 > using System.CodeDom.Compiler; ...
16 class Result
17 {
18
19     /*
20      * Complete the 'groupDivision' function below.
21      *
22      * The function is expected to return an INTEGER.
23      * The function accepts following parameters:
24      * 1. INTEGER_ARRAY levels
25      * 2. INTEGER maxSpread
26      */
27 }
```

Line: 16 Col: 1

Test Results

Custom Input

Run Code

Run Tests

Submit

Compiled successfully. All available test cases passed

Test case 0

Test case 1

Test case 2

Test case 3

Test case 4

Input (stdin)

Run as Custom Input | Download

```
1 4
2 4
3 8
4 1
5 7
6 3
```



1h 50m left

BETA

Can't read the text? [Switch theme](#)

4. Product of the Maximum and Minimum in a Dataset

Starting with an empty set of integers named *elements*, perform the following query operations:

- The command *push x* inserts the value of *x* into *elements*.
- The command *pop x* removes the value of *x* from *elements*.

The integers in *elements* need to be ordered in such a way that after performing each operation, the product of the maximum and minimum values in the set can be easily calculated.

Function Description

Complete the function *maxMin* in the editor below.

maxMin has the following parameter(s):

- string operations[n]*: an array of operations strings
- int x[n]*: an array of *x* where *x[i]* goes with *operations[i]*.

Returns:

- int[n]*: an array of long integers denoting the product of the maximum and minimum of *elements* after each query.

InfoC#Autocomplete Ready

```
28
29 public static List<long> maxMin(List<string> operations, List<int> x)
30 {
31     List<long> parray = new List<long>();
32     List<long> elements = new List<long>();
33     long max = long.MinValue;
34     long min = long.MaxValue;
35
36     for(int i = 0; i<operations.Count; i++)
37     {
38         if(operations[i].Equals("push"))
39         {
40             elements.Add((long)x[i]);
41             if(max<x[i])
42             {
43                 max = x[i];
44             }
45             if(min>x[i])
46             {
47                 min = x[i];
48             }
49         }
50     }
51
52     List<long> result = new List<long>();
53     for(int i = 0; i<operations.Count; i++)
54     {
55         if(operations[i].Equals("push"))
56         {
57             result.Add(max * min);
58         }
59         else if(operations[i].Equals("pop"))
60         {
61             if(elements.Count > 0)
62             {
63                 elements.RemoveAt(elements.Count - 1);
64             }
65             if(max < elements[elements.Count - 1])
66             {
67                 max = elements[elements.Count - 1];
68             }
69             if(min > elements[elements.Count - 1])
70             {
71                 min = elements[elements.Count - 1];
72             }
73             result.Add(max * min);
74         }
75     }
76
77     return result;
78 }
```

Line: 49 Col: 22

Test ResultsCustom InputRun CodeRun TestsSubmit

Compiled successfully. All available test cases passed

Test case 0

Test case 1

Test case 2

Input (stdin)

Run as Custom Input | Download

1	4
2	push

Technical Training GN22/

Assignment

Arrays - DS | HackerRank

screenshot in windows 10 - Goo

hackerrank.com/challenges/arrays-ds/problem?isFullScreen=true

MapsUC-b15f90a4-aae0-...

HackerRank

Prepare > Data Structures > Arrays > Arrays - DS

Exit Full Screen View

Problem

Submissions

Leaderboard

Discussions

An array is a type of data structure that stores elements of the same type in a contiguous block of memory. In an array, A , of size N , each memory location has some unique index, i (where $0 \leq i < N$), that can be referenced as $A[i]$ or A_i .

Reverse an array of integers.

Note: If you've already solved our C++ domain's Arrays Introduction challenge, you may want to skip this.

Example
 $A = [1, 2, 3]$
Return $[3, 2, 1]$.

Function Description
Complete the function `reverseArray` in the editor below.
`reverseArray` has the following parameter(s):

- `int A[n]`: the array to reverse

Returns

- `int[n]`: the reversed array

Input Format
The first line contains an integer, N , the number of integers in A .
The second line contains N space-separated integers that make up A .

Constraints

- $1 \leq N \leq 10^3$
- $1 \leq A[i] \leq 10^4$, where $A[i]$ is the i^{th} integer in A

Sample Input 1

```
3
1 2 3
```

CopyDownload

change themechange language

```
1 using System;
2 using System.Collections.Generic;
3 using System.IO;
4 class Solution {
5     static void Main(String[] args) {
6         int length=0;
7         string input="";
8         length=Convert.ToInt32(Console.ReadLine());
9         input=Console.ReadLine();
10        for(int i=length-1;i>=0;i--)
11        {
12            Console.Write(input.Split(' ')[i]+" ");
13        }
14    }
```

Line: 14 Col: 6

Upload Code as File

Test against custom input

Run Code

Submit Code

37°C Haze

18:12

04-04-2022

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3. Sort an Array

Given an array of integers, any array element can be moved to the end in one *move*. Determine the minimum number of moves required to sort the array, ascending.

Example:

`arr = [5, 1, 3, 2]`

- Move the value `arr[2] = 3` to the end to get `arr = [5, 1, 2, 3]`.
- Move `arr[0] = 5` to the end to achieve the sorted array, `arr = [1, 2, 3, 5]`.
- The minimum number of moves required to sort the array is 2.

Function Description

Complete the function `getMinimumMoves` in the editor below.

`getMinimumMoves` has the following parameter:

- `int arr[n]`: an array of integers

Returns:

- `int`: the minimum number of moves needed to sort the array in ascending order

Constraints

Info C# Autocomplete Ready

```
16
17 class Result
18 {
19
20     /*
21      * Complete the 'getMinimumMoves' function below.
22      *
23      * The function is expected to return an INTEGER.
24      * The function accepts INTEGER_ARRAY arr as parameter.
25      */
26
27     public static int getMinimumMoves(List<int> arr)
28     {
```

Line: 16 Col: 1

Test Results

Custom Input

Run Code

Run Tests

Submit

Compiled successfully. All available test cases passed

Test case 0

Test case 1

Test case 2

Test case 3

Test case 4

Input (stdin)

Run as Custom Input | Download

```
1 3
2 1
3 2
4 3
```

Your Output (stdout)

```
1 0
```

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2. Array Game

Given an array of integers, determine the number of moves to make all elements equal. Each move consists of choosing all but 1 element and incrementing their values by 1.

Example

numbers = [3, 4, 6, 6, 3]

Choose 4 of the 5 elements during each move and increment each of their values by one. Indexing begins at 1. It takes 7 moves as follows:

Unchanged	Iteration	element's index
Array		
6, 6, 3]	0	[3, 4,
7, 6, 4]	1	3 [4, 5,
7, 7, 5]	2	2 [5, 6,
8, 7, 6]	3	3 [6, 7,
8, 8, 7]	4	2 [7, 8,
9, 8, 8]	5	3 [8, 9,
	6	3 [9, 9,

Info C# Autocomplete Ready

```
1 > using System.CodeDom.Compiler; ...
16
17 class Result
18 {
19
20     /*
21      * Complete the 'countMoves' function below.
22      *
23      * The function is expected to return a LONG_INTEGER.
24      * The function accepts INTEGER_ARRAY numbers as parameter.
25      */
26
27     public static long countMoves(List<int> numbers)
```

Line: 16 Col: 1

Test Results

Custom Input

Run Code

Run Tests

Submit

Compiled successfully. All available test cases passed

Test case 0

Test case 1

Test case 2

Test case 3

Test case 4

Input (stdin)

Run as Custom Input | Download

```
1 5
2 5
3 6
4 8
5 8
6 5
```



44m left

⌕

ALL

1

2

3

4

5

BETA

Can't read the text? [Switch theme](#)

2. Count Duplicate Elements

Given an integer array, *numbers*, count the number of elements that occur more than once.

Example
numbers = [1, 3, 3, 4, 4]

Function Description
Complete the function *countDuplicate* in the editor below.

countDuplicate has the following parameter(s):
int numbers[n]: an array of integers

Returns:
int: an integer that denotes the number of non-unique values in the *numbers* array

Constraints

InfoC#Autocomplete Ready

```
19  /*
20  * Complete the 'countDuplicate' function below.
21  *
22  * The function is expected to return an INTEGER.
23  * The function accepts INTEGER_ARRAY numbers as parameter.
24  */
25
26  public static int countDuplicate(List<int> numbers)
27  {
28      Dictionary<int, int> frequency = new Dictionary<int, int>();
29      for(int i=0; i<numbers.Count; i++)
30      {
31          // Complete the function below
32      }
33  }
```

Line: 16 Col: 1

Test ResultsCustom InputRun CodeRun TestsSubmit

Compiled successfully. All available test cases passed

Test case 3Test case 4Test case 5Test case 6Test case 7

Input (stdin)

1	8
2	1
3	3
4	1
5	4
6	5
7	6

Run as Custom Input | Download

44m left

3. Autoscale Policy

ALL

1

2

3

4

5

BETA

Can't read the text? [Switch theme](#)

3. Autoscale Policy

A scaling computing system checks its average utilization every second while it monitors. It implements an autoscale policy to increase or reduce instances depending on the current load as described below. Once an action of increasing or reducing the number of instances is performed, the system will stop monitoring for 10 seconds. During that time, the number of instances does not change.

- If the average utilization < 25%, then an action is instantiated to reduce the number of instances by half if the number of instances is greater than 1. Take the ceiling if the number is not an integer. If the number of instances is 1, take no action.
- If $25\% \leq \text{average utilization} \leq 60\%$, take no action.
- If the average utilization > 60%, then an action is instantiated to double the number of instances if the doubled value does not exceed $2 * 10^8$. If the number of instances exceeds this limit upon doubling, take no action.

Given an array of integers that represent the average utilization at each second, determine the number of instances at the end of the time frame.

Example
`instances = 2`

InfoJava 8Autocomplete Ready

```
24
25 public static int finalInstances(int instances, List<Integer> averageUtil) {
26
27     for(int i=0; i<averageUtil.size(); i++){
28
29         if(averageUtil.get(i) < 25)
30         {
31
32             if(instances!= 1 && (instances & 1) == 0)
33             {
34
35                 instances = instances / 2;
```

Line: 14 Col: 1

Test ResultsCustom InputRun CodeRun TestsSubmit

Compiled successfully. All available test cases passed

Test case 10Test case 11Test case 12Test case 13Test case 14

Input (stdin)

Run as Custom InputDownload

1	1
2	3
3	5
4	10
5	80

Your Output (stdout)

HackerRank Question - Distinct T

hackerrank.com/test/eifsidn6q35/questions/6h5sacnq5l3

GmailYouTubeMapsAWS Cloud Practiti...Python for Data Sci...OneCognizantlearnhandbook.phpMicrosoft TeamsComplete C# Maste...New Tab

44m left

BETA

Can't read the text? Switch theme

5. Distinct Digit Numbers

Given a range of integers, determine how many numbers have no repeating digits.

Example
n=80
m=120

The lower and upper bounds are inclusive, so there are 120-79=41 values in the range. Numbers without repeating characters are normal weight and green. Others are bold and red. The two columns to the right are the valid number counts per row (green) and invalid number counts (bold/red).

80	81	82	83	84	85	86	87
90	91	92	93	94	95	96	97
100	101	102	103	104	105	106	107
110	111	112	113	114	115	116	117
120							

InfoJava 8Autocomplete Ready

```
18 static void countNumbers(List<List<Integer>> arr)
19 {
20     int A[][]= new int[arr.size()][2];
21     int x = 0;
22     for(List<Integer> item:arr)
23     {
24         for(int i=0 ; i<item.size();i++)
25         {
26             A[x][i]=item.get(i);
27         }
28         x++;
29     }
30     for(int i=0;i<arr.size();i++)
31     {
32         int l=A[i][0];
33         int r=A[i][1];
34         long count =0;
35         for(int j=l ;j<=r;j++)
36         {
37             int num=j;
38             boolean visited[]= new boolean[10];
39             while (num!=0)
40             {
41                 if(visited[num%10])
42                     break;
43                 visited[num%10]=true;
```

Line: 13 Col: 24

Test ResultsCustom Input

Run CodeRun TestsSubmit

Compiled successfully. 9/11 test cases passed

Use print or log statements to debug why your hidden test cases are failing. Hidden test cases are used to evaluate if your code can handle different scenarios, including corner cases.

BETA Can't read the text? [Switch theme](#)

5. Autoscale Policy

A scaling computing system checks its average utilization every second while it monitors. It implements an autoscale policy to increase or reduce instances depending on the current load as described below. Once an action of increasing or reducing the number of instances is performed, the system will stop monitoring for 10 seconds. During that time, the number of instances does not change.

- If the *average utilization* < 25%, then an action is instantiated to reduce the number of instances by half *if* the number of instances is greater than 1. Take the ceiling if the number is not an integer. If the number of instances is 1, take no action.
- If $25\% \leq \text{average utilization} \leq 60\%$, take no action.
- If the *average utilization* > 60%, then an action is instantiated to double the number of instances *if* the doubled value does not exceed $2 * 10^8$. If the number of instances exceeds this limit upon doubling, take no action.

Given an array of integers that represent the average utilization at each second, determine the number of instances at the end of the time frame.

Example

instances = 2

Info C# Autocomplete Ready

```
16
17 class Result
18 {
19
20     /*
21      * Complete the 'finalInstances' function below.
22      *
23      * The function is expected to return an INTEGER.
24      * The function accepts following parameters:
25      * 1. INTEGER instances
26      * 2. INTEGER_ARRAY averageUtil
27      */
28 }
```

Line: 16 Col: 1

Test Results

Custom Input

Run Code

Run Tests

Submit

Compiled successfully. All available test cases passed

Test case 0

Test case 1

Test case 2

Test case 3

Test case 4

Input (stdin)

Run as Custom Input | Download

1	1
2	3
3	5
4	10
5	80

Your Output (stdout)



43m left

BETA

Can't read the text? [Switch theme](#)

4. Product of the Maximum and Minimum in a Dataset

Starting with an empty set of integers named *elements*, perform the following query operations:

1

• The command *push x* inserts the value of *x* into *elements*.

2

• The command *pop x* removes the value of *x* from *elements*.

3

The integers in *elements* need to be ordered in such a way that after performing each operation, the product of the maximum and minimum values in the set can be easily calculated.

4

Function Description

Complete the function *maxMin* in the editor below.

maxMin has the following parameter(s):
 string operations[n]: an array of operations strings
 int x[n]: an array of *x* where *x[i]* goes with *operations[i]*.

5

Info

C#

Autocomplete Ready

```
25  * 2. INTEGER_ARRAY_A
26  */
27
28  public static List<long> maxMin(List<string> operations, List<int> x)
29  {
30      List<long> elements = new List<long>();
31      List<long> System.Int64 ew List<long>();
32      long max=long.MinValue;
33      long min=long.MaxValue;
34
35      for(int i=0; i<operations.Count(); i++){
36          if(operations[i].Equals("push")){
37              elements.Add((long)x[i]);
38          }
39          else if(operations[i].Equals("pop")){
40              if(elements.Count > 0){
41                  elements.RemoveAt(0);
42              }
43          }
44      }
45
46      // Sort the elements
47      elements.Sort();
48
49      // Calculate the product of max and min
50      long product = max * min;
51
52      return product;
53  }
```

Line: 16 Col: 1

Test Results

Custom Input

Run Code

Run Tests

Submit

Compiled successfully. All available test cases passed

Test case 8

Test case 9

Test case 10

Test case 11

Test case 12

Input (stdin)

Run as Custom Input | Download

1	4
2	push
3	push
4	push
5	pop
6	4
7	1

Type here to search

ENG IN

4:47 PM


3/31/2022

43m left

5. Binary Number in a Linked List

A binary number is represented as a series of 0s and 1s. In this challenge, the series will be in the form of a singly-linked list. Each node instance, a `LinkedListNode`, has a value, `data`, and a pointer to the next node, `next`. Given a reference to the head of a singly-linked list, convert the binary number represented to a decimal number.

Example



Linked list corresponding to the binary number $(010011)_2$ or $(19)_{10}$.

Function Description

Complete the function `getNumber` in the editor below.

`getNumber` has the following parameter(s):

- `binary`: reference to the head of a singly-linked list of binary digits

InfoC#Autocomplete Ready

```
92  *
93  */
94
95  public static long getNumber(SinglyLinkedListNode binary)
96  {
97      long res = 0;
98      SinglyLinkedListNode a = binary;
99      while(a != null){
100         res = (res<<1) + (a.data);
101         a = a.next;
102     }
103     return res;

```

Test ResultsCustom InputRun CodeRun TestsSubmit

Compiled successfully. All available test cases passed

Test case 9Test case 10Test case 11Test case 12Test case 13

Input (stdin)

1 7
2 0
3 0
4 1
5 1
6 0
7 1

1h 26m left

BETA

Can't read the text? [Switch theme](#)

1. Frequency Sort

Given an array of n item values, sort the array in ascending order, first by the frequency of each value, then by the values themselves.

Example
 $n = 6$
 $items = [4, 5, 6, 5, 4, 3]$

- There are 2 values that occur once: $[3, 6]$.
- There are 2 values that occur twice: $[4, 4, 5, 5]$.
- The array of items sorted by frequency and then by value in ascending order is $[3, 6, 4, 4, 5, 5]$

Function Description
Complete the function `itemsSort` in the editor below.

`itemsSort` has the following parameter(s):
`int items[n]`: the array to sort

Returns
`int[n]`: the sorted array

Constraints

- $1 \leq n \leq 2 \times 10^5$
- $1 \leq items[i] \leq 10^6$

InfoC#Autocomplete Ready

```
23  * The function is expected to return an INTEGER_ARRAY.
24  * The function accepts INTEGER_ARRAY items as parameter.
25  */
26
27  public static List<int> itemsSort(List<int> items)
28  {
29      var result = items.GroupBy(n=>n).OrderBy(g=>g.Count()).ThenBy(g=>g.Key).SelectMany(g=>g);
30      return result.ToList();
31  }
32
33  }
34
35  > class Solution ...
```

Line: 30 Col: 26

Test ResultsCustom InputRun CodeRun TestsSubmit

Compiled successfully. All available test cases passed

Test case 0

Test case 1

Test case 2

Test case 3

Test case 4

Input (stdin)

Run as Custom Input | Download

1	5
2	3
3	1
4	2
5	2
6	4

BETA Can't read the text? Switch theme

1. Meandering Array

An array of integers is defined as being in *meandering* order when the first two elements are the respective largest and smallest elements in the array and the subsequent elements alternate between its next largest and next smallest elements. In other words, the elements are in order of *[first_largest, first_smallest, second_largest, second_smallest, ...]*.

Example

The array $[-1, 1, 2, 3, -5]$ sorted normally is $[-5, -1, 1, 2, 3]$. Sorted in meandering order, it becomes $[3, -5, 2, -1, 1]$.

Function Description

Complete the function *meanderingArray* in the editor below.

meanderingArray has the following parameter(s):
unsorted[n]: the unsorted array

Returns:

int[n]: the array sorted in meandering order

Constraints

- $2 \leq n \leq 10^4$
- $-10^6 \leq \text{unsorted}[i] \leq 10^6$

Info

C#

Autocomplete Ready



```
16 {
17
18     /*
19      * Complete the 'meanderingArray' function below.
20      *
21      * The function is expected to return an INTEGER_ARRAY.
22      * The function accepts INTEGER_ARRAY unsorted as parameter.
23      */
24
25     public static List<int> meanderingArray(List<int> unsorted)
26     {
27         unsorted.Sort();
28         // Add suggested code here
29     }
30 }
```

Line: 16 Col: 1

Test Results

Custom Input

Run Code

Run Tests

Submit

Compiled successfully. All available test cases passed

Test case 0

Test case 1

Test case 2

Test case 3

Test case 4

Input (stdin)

Run as Custom Input | Download

```
1 7
2 5
3 2
4 7
5 8
6 -2
7 25
```



52m left

3. Vowels

Given a string array that contains n elements, each composed of lowercase English letters, and q queries, each query of the format $l-r$, for each query, determine how many strings starting from index l and ending at index r have vowels as the first and last character. Vowels are in $\{a,e,i,o,u\}$.

Example
 $strArr = ['aba', 'bc'b', 'ece', 'aa', 'e']$
 $queries = ['1-3', '2-5', '2-2']$

These strings represent two dash delimited integers l and r , the start and end indices of the interval, inclusive. Using 1-based indexing in the string array, the interval 1-3 contains two strings that start and end with a vowel: 'aba' and 'ece'. The interval 2-5 also has three. The third interval, from 2-2, the only element in the interval, 'bc'b' does not begin and end with a vowel. The

C#

Autocomplete Disabled

```
44 }
45
46 }
47 foreach( string qry in query)
48 {
49     count+=0;
50     string[] lrStringArray= qry.Split('-');
51     l= Int16.Parse(lrStringArray[0])-1;
52     r= Int16.Parse(lrStringArray[1])-1;
53 }
```

Line: 68 Col: 38

Test ResultsCustom InputRun CodeRun TestsSubmit

Compiled successfully. All available test cases passed

Test case 0

Test case 1

Test case 2

Test case 3

Input (stdin)

Run as Custom Input | Download

1	5
2	aab
3	a
4	bcd
5	awe

1h 54m left

1

2

3

4

5

BETA Can't read the text? Switch theme

1. Frequency Sort

Given an array of n item values, sort the array in ascending order, first by the frequency of each value, then by the values themselves.

Example

$n = 6$

$items = [4, 5, 6, 5, 4, 3]$

- There are 2 values that occur once: $[3, 6]$.
- There are 2 values that occur twice: $[4, 5, 5]$.
- The array of items sorted by frequency and then by value in ascending order is $[3, 6, 4, 4, 5, 5]$

Function Description

Complete the function `itemsSort` in the editor below.

Info C# Autocomplete Disabled

```
25 */
26
27 public static List<int> itemsSort(List<int> items)
28 {
29     var result = items.GroupBy(n=>n).OrderBy(g=>g.Count()).ThenBy(g=>g.Key).
SelectMany(g=>g);
30
31     return result.ToList();
32 }
33
```

Line: 29 Col: 77

Test Results Custom Input Run Code Run Tests Submit

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Test case 0

Test case 1

Test case 2

Test case 3

Input (stdin)

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1	5
2	3
3	1
4	2
5	2

58m left

5

5. Is Possible

Consider a pair of integers, (a, b) . The following operations can be performed on (a, b) in any order, zero or more times.

- $(a, b) \rightarrow (a + b, b)$
- $(a, b) \rightarrow (a, a + b)$

Return a string that denotes whether or not (a, b) can be converted to (c, d) by performing the operation zero or more times.

Example

$(a, b) = (1, 1)$
 $(c, d) = (5, 2)$

Perform the operation $(1, 1 + 1)$ to get $(1, 2)$, perform the operation $(1 + 2, 2)$ to get $(3, 2)$, and perform the operation $(3 + 2, 2)$ to get $(5, 2)$. Alternatively, the first operation could be $(1 + 1, 1)$ to get $(2, 1)$ and so on. The diagram below demonstrates the example

InfoC#Autocomplete Disabled

```
31 public static string isPossible(int a, int b, int c, int d)
32 {
33     return gcd(a,b)==gcd(c,d) ? "Yes" : "No";
34 }
35
36 public static long gcd(long p,long q)
37 {
38     return q==0 ? p: gcd(q,p%q);
39 }
40
```

Line: 16 Col: 1

Test Results

Custom Input

Run Code

Run Tests

Submit

Compiled successfully. 9/10 test cases passed

Use print or log statements to debug why your hidden test cases are failing. Hidden test cases are used to evaluate if your code can handle different scenarios, including corner cases.

Test case 0

Test case 1

Test case 2

Your Output (stdout)

1	Yes
---	-----

2h 18m left

2. Sort an Array

Given an array of integers, any array element can be moved to the end in one *move*. Determine the minimum number of moves required to sort the array, ascending.

Example:

arr = [5, 1, 3, 2]

- Move the value *arr*[2] = 3 to the end to get *arr* = [5, 1, 2, 3].
- Move *arr*[0] = 5 to the end to achieve the sorted array, *arr* = [1, 2, 3, 5].
- The minimum number of moves required to sort the array is 2.

Function Description

Complete the function *getMinimumMoves* in the editor below.

getMinimumMoves has the following

Info

C#

Autocomplete Disabled

26
27
28
29
30
31
32
33
34
35

```
public static int getMinimumMoves(List<int> arr)
{
    List<int> sortedArray=new List<int>();
    int temp=0;
    int check=0;
    int output=0;
    foreach(int a in arr)
    {
        sortedArray.Add(a);
    }
}
```

Line: 33 Col: 30

Test ResultsCustom InputRun CodeRun TestsSubmit

Compiled successfully. All available test cases passed

Test case 0

Test case 1

Test case 2

Test case 3

Your Output (stdout)

10

Expected Output

10

Download

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5. Distinct Digit Numbers

Given a range of integers, determine how many numbers have no repeating digits.

Example

$$n=80$$
$$m=120$$

The lower and upper bounds are inclusive, so there are $120-79+1=41$ values in the range. Numbers without repeating characters are normal weight and green. Others are bold and red. The two columns to the right are the valid number counts per row (green) and invalid number counts (bold/red).

80	81	82	83	84	85	86	87
90	91	92	93	94	95	96	97
100	101	102	103	104	105	106	107
110	111	112	113	114	115	116	117
120							

```
18 static void countNumbers(List<List<Integer>> arr)
19 {
20     int A[][] = new int[arr.size()][2];
21     int x = 0;
22     for(List<Integer> item:arr)
23     {
24         for(int i=0 ; i<item.size();i++)
25         {
26             A[x][i]=item.get(i);
27         }
28         x++;
29     }
30     for(int i=0;i<arr.size();i++)
31     {
32         int l=A[i][0];
33         int r=A[i][1];
34         long count =0;
35         for(int j=l ;j<=r;j++)
36         {
37             int num=j;
38             boolean visited[] = new boolean[10];
39             while (num!=0)
40             {
41                 if(visited[num%10])
42                     break;
43                 visited[num%10]=true;
```

Submit

Compiled successfully. 9/11 test cases passed

Use print or log statements to debug why your hidden test cases are failing. Hidden test cases are used to evaluate if your code can handle different scenarios, including corner cases.

Email - Joshi, Vikram (Contractor) x HackerRank Question - Product x

hackerrank.com/test/eifsidn6q35/questions/dg08ij7bqka

Gmail YouTube Maps

31m left

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4. Product of the Maximum and Minimum in a Dataset

Starting with an empty set of integers named *elements*, perform the following query operations:

1

- The command *push x* inserts the value of *x* into *elements*.
- The command *pop x* removes the value of *x* from *elements*.

3The integers in *elements* need to be ordered in such a way that after performing each operation, the product of the maximum and minimum values in the set can be easily calculated.

4

Function Description

Complete the function *maxMin* in the editor below.

maxMin has the following parameter(s):
string operations[n]: an array of operations strings
int x[n]: an array of *x* where *x[i]* goes with *operations[i]*.

Returns:

5

Info C# Autocomplete Ready

```
50 }
51
52     else{
53         elements.Remove((long)x[i]);
54         min= elements.Min();
55         max = elements.Max();
56         parray.Add(min*max);
57     }
58 }
59 return parray;
60 }
```

Line: 55 Col: 28

Test Results Custom Input Run Code Run Tests Submit

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Test case 0

Test case 1

Test case 2

Test case 3

Input (stdin)

Run as Custom Input | Download

1	4
2	push
3	push
4	push
5	pop
6	4

Windows Taskbar

ENG IN 17:00 31-03-2022

Email - Joshi, Vikram (Contractor) xHackerRank Question - Twin Stri x

hackerrank.com/test/eifsidn6q35/questions/16jjpf1mcg2

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1h 14m left

BETA

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3. Twin Strings

ALL

Two strings are called *twins* if they can be made equivalent by performing some number of operations on one or both strings. There are two possible operations:

1

2

3

4

5

• SwapEven: Swap a character at an even-numbered index with a character at another even-numbered index.

• SwapOdd: Swap a character at an odd-numbered index with a character at another odd-numbered index.

There will be two string arrays. At each index of the two arrays, compare a string from each array, aligned by index, and store the result in a final string array. The return array should consist of strings either "Yes" or "No", based on whether the strings compared are twins or not.

Example

firstString = ["abcd", "abcd"]
secondString = ["cbad", "adbcd"]

• Compare the two strings firstString[0] and secondString[0]. One SwapEven operation allows us

InfoC#Autocomplete Ready

48
49
50
51
52
53
54
55
56
57
58
59 > class Solution...

Line: 56 Col: 2

Test ResultsCustom InputRun CodeRun TestsSubmit

Compiled successfully. All available test cases passed

Test case 0

Test case 1

Test case 2

Test case 3

Input (stdin)

Run as Custom Input | Download

1 3
2 cdab
3 dcba
4 abcd
5 3
6 abcd

WindowsTask ViewFile ExplorerMicrosoft EdgeMailGoogle ChromeWhatsAppTelegram

ENG IN16:1731-03-2022

Email - Joshi, Vikram (Contractor) xHackerRank Question - Autoscale x

hackerrank.com/test/eifsidn6q35/questions/1hp11c6d1fq

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55m left

BETA

Can't read the text? Switch theme

2. Autoscale Policy

A scaling computing system checks its average utilization every second while it monitors. It implements an autoscale policy to increase or reduce instances depending on the current load as described below. Once an action of increasing or reducing the number of instances is performed, the system will stop monitoring for 10 seconds. During that time, the number of instances does not change.

- If the average utilization < 25%, then an action is instantiated to reduce the number of instances by half if the number of instances is greater than 1. Take the ceiling if the number is not an integer. If the number of instances is 1, take no action.
- If $25\% \leq \text{average utilization} \leq 60\%$, take no action.
- If the average utilization > 60%, then an action is instantiated to double the number of instances if the doubled value does not exceed $2 * 10^5$. If the number of instances exceeds this limit upon doubling, take no action.

Given an array of integers that represent the average utilization at each second, determine the number of instances at the end of the time frame.

Example

InfoJava 8Autocomplete Ready

```
53         return instances;
54     }
55 }
56 }
57 }
58 }
59 }
60 }
61 }
62 }
63 } public class Solution { ...
92 }
```

Line: 61 Col: 1

Test ResultsCustom InputRun CodeRun TestsSubmit

Compiled successfully. All available test cases passed

Test case 0Test case 1Test case 2Test case 3

Input (stdin)

1	1
2	3
3	5
4	10
5	80

Run as Custom Input | Download

16:3631-03-2022

Email - Joshi, Vikram (Contractor)HackerRank Question - Distinct Digit Numbershackerrank.com/test/eifsidn6q35/questions/6h5sacnq5l3GmailYouTubeMaps

15m left

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5. Distinct Digit Numbers

Given a range of integers, determine how many numbers have no repeating digits.

Example
n=80
m=120

The lower and upper bounds are inclusive, so there are 120-79=41 values in the range. Numbers without repeating characters are normal weight and green. Others are bold and red. The two columns to the right are the valid number counts per row (green) and invalid number counts (bold/red).

80	81	82	83	84	85	86	87
90	91	92	93	94	95	96	97
100	101	102	103	104	105	106	107
110	111	112	113	114	115	116	117
120							

InfoJava 8Autocomplete Ready

```
22 for(int i=0;i<item.size();i++)
23 {
24     A[x][i]=item.get(i);
25 }
26 x++;
27
28 for(int i=0;i<arr.size();i++)
29 {
30     int l=A[i][0];
31     int r=A[i][1];
32 }
```

Line: 27 Col: 16

Test ResultsCustom InputRun CodeRun TestsSubmit

Compiled successfully. 10/11 test cases passed

Use print or log statements to debug why your hidden test cases are failing. Hidden test cases are used to evaluate if your code can handle different scenarios, including corner cases.

Test case 10

Test case 0

Test case 1

Test case 2

Compiler Message

Time limit exceededAllowed time limit: 4 secs

Your code did not execute in time. Please optimize your code. For more details on runtime environment, click the "Info" button

Your Output (stdout)

31-03-202217:16

ENG IN

Email - Joshi, Vikram (Contractor) x HackerRank Question - Meanderi x

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2m 55s left

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1. Meandering Array

An array of integers is defined as being in *meandering* order when the first two elements are the respective largest and smallest elements in the array and the subsequent elements alternate between its next largest and next smallest elements. In other words, the elements are in order of *[first_largest, first_smallest, second_largest, second_smallest, ...]*.

Example
The array *[-1, 1, 2, 3, -5]* sorted normally is *[-5, -1, 1, 2, 3]*. Sorted in meandering order, it becomes *[3, -5, 2, -1, 1]*.

Function Description
Complete the function *meanderingArray* in the editor below.

meanderingArray has the following parameter(s):
unsorted[n]: the unsorted array

Returns:
int[n]: the array sorted in meandering order

Constraints

Info C# Autocomplete Ready

```
43 }
44 for(int k=0;k<n;k++)
45 {
46     unsorted[k]= tempArr[k];
47 }
48 return unsorted;
49 }
50 }
51 }
52 }
53 class Solution
54
```

Line: 53 Col: 15

Test Results Custom Input Run Code Run Tests Submit

Compilation error

Use print or log statements to debug why your hidden test cases are failing. Hidden test cases are used to evaluate if your code can handle different scenarios, including corner cases.

Compilation command

```
mcs -debug -unsafe -sdk:4.7.2 -r:System.Reactive.Debugger,System.Reactive.Providers,System.Reactive.Observable.Aliases,System.Reactive.PlatformServices,System.Reactive.Runtime.Remoting,System.Reactive.Windows.Forms,System.Reactive.Windows.Threading,System.Reactive.Interfaces,System.Reactive.Linq,System.Reactive.Core -r:System.Numerics -r:System.Data -r:System.Net.Http -r:System.Net.Http.Formatting -r:Mono.Data.Sqlite -r:/usr/lib/cli/Newtonsoft.Json-5.0/Newtonsoft.Json.dll -r:System.Runtime.Serialization Solution.cs -o:Solution.exe
```

Compilation message

Windows Taskbar

ENG IN 17:28 31-03-2022

HackerRank Question - Twin Str...

hackerrank.com/test/eifsidn6q35/questions/16jjpf1mcg2

GmailYouTubeMapsAWS Cloud Practiti...Python for Data Sci...OneCognizantlearnhandbook.phpMicrosoft TeamsComplete C# Maste...New Tab

1h 17m left

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3. Twin Strings

Two strings are called *twins* if they can be made equivalent by performing some number of operations on one or both strings. There are two possible operations:

1

2

3

4

5

- SwapEven: Swap a character at an even-numbered index with a character at another even-numbered index.
- SwapOdd: Swap a character at an odd-numbered index with a character at another odd-numbered index.

There will be two string arrays. At each index of the two arrays, compare a string from each array, aligned by index, and store the result in a final string array. The return array should consist of strings either "Yes" or "No", based on whether the strings compared are twins or not.

Example

```
firstString = ["abcd", "abcd"]
secondString = ["cbad", "adbc"]
```

- Compare the two strings `firstString[0]` and `secondString[0]`. One SwapEven operation allows us to swap the characters "a" and "c" of the string "abcd" and make it equivalent to "cbad" ("abcd" →

InfoC#Autocomplete Ready

```
27
28 public static List<string> twins(List<string> a, List<string> b)
29 {
30     var r=new string[a.Count];
31     for(var i=-1;++i<a.Count;)
32     {
33         string itemA=a[i],itemB=b[i];
34         bool isTwin = itemA.Length==itemB.Length;
35         if(isTwin)
36         {
37             var map=new int['z'-'a'+1,2];
38             for(var j=-1; ++j<itemB.Length;)
39             {
40                 ++map[itemB[j]-'a',j&1];
41             }
42             for(var j=-1;++j<itemB.Length;)
43             {
44                 if(--map[itemA[j]-'a',j&1]<0)
45                 {
46                     isTwin=false;
47                     break;
48                 }
49             }
50         }
51     }
52     return r;
53 }
```

Line: 53 Col: 21

Test ResultsCustom InputRun CodeRun TestsSubmit

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Test case 0

Test case 1

Input (stdin)

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