

Started on	Monday, 25 March 2024, 8:28 PM
State	Finished
Completed on	Wednesday, 27 March 2024, 6:43 PM
Time taken	1 day 22 hours
Marks	5.00/5.00
Grade	50.00 out of 50.00 (100%)
Name	HARINI V 2022-CSD-A

Question 1

Correct

Mark 1.00 out of 1.00

Write a program that reads integers from the user and stores them in a list. Use 0 as a sentinel value to mark the end of the input. Once all of the values have been read your program should display them (except for the 0) in reverse order, with one value appearing on each line.

Sample Input

```
33
11
22
55
44
0
```

Sample Output

```
55
44
33
22
11
```

For example:

Input	Result
33	55
11	44
22	33
55	22
44	11
0	

Answer: (penalty regime: 0 %)

```
1 x= int(input())
2 arr= [0]
3 n=0
4 while(x!=0):
5     arr[n]= x
6     x= int(input())
7     arr.append(x)
8     n=n +1
9 temp = 0
10 for i in range (0,n):
11     for j in range(i,n):
12         if(arr[i]<arr[j]):
13             temp= arr[i]
14             arr[i]= arr[j]
15             arr[j]=temp
16 for i in range (0,n):
17     print(arr[i])
```

	Input	Expected	Got	
✓	33 11 22 55 44 0	55 44 33 22 11	55 44 33 22 11	✓
✓	50 40 20 10 30 0	50 40 30 20 10	50 40 30 20 10	✓
✓	1 2 3 4 5 6 7 8 9 0	9 8 7 6 5 4 3 2 1	9 8 7 6 5 4 3 2 1	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

A teacher in a school entered marks in an array. But mistakenly the teacher repeated the marks twice in between the array. Help the teacher to find how many elements are duplicated in an array

Input:

n – number of elements and the elements to be stored in an array.

Output:

d- number of duplicate elements

Sample Test Case**Input**

8

21 35 56 67 67 89 89 90

Output

2

Explanation

The numbers 67 and 89 are repeated , so count is 2

Answer: (penalty regime: 0 %)

```
1 def count_duplicates(marks):
2     unique_marks= set()
3     duplicate_count = 0
4     for mark in marks:
5         if mark in unique_marks:
6             duplicate_count+= 1
7         else:
8             unique_marks.add(mark)
9     return duplicate_count
10 n=int(input())
11 marks= list(map(int,input().split()))
12 print(count_duplicates(marks))
```

	Input	Expected	Got	
✓	8 21 35 56 67 67 89 89 90	2	2	✓
✓	12 56 56 78 78 90 90 95 97 97 99 99 89	5	5	✓
✓	4 67 67 89 90	1	1	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **3**

Correct

Mark 1.00 out of 1.00

Consider the following program statement:

One needs to first input a set of N number of ALPHABETIC Strings each representing a name of a student in an array studname [N]. Assume each string can be Max. 40 Character Long. Subsequently, one needs to input Marks obtained by those students in another array marks [N]. Assume that studname[i] i.e. ith student in the list of student names has obtained Marks [i] in the Marks List. You need to find out and print the Max Marks obtained by a student and also print the name of the student who has obtained this marks. Considering here both the arrays of size 5. Complete the program by filling up required code in editable section.

Sample Test Cases

Test Case 1

Input

Amit

Bratin

Sandip

Sundar

Patrick

34

48

23

16

45

Output

48

Bratin

Test Case 2

Input

Amit

Bratin

Sandip

Sundar

Patrick

49

48

34

23

45

Output

49

Amit

For example:

Input	Result
Amit	90
Bratin	Bratin
Sandip	
Sundar	
Patrick	
89	
90	
45	
67	
82	

Answer: (penalty regime: 0 %)

```
1 arr1=[0]
2 arr2= [0]
3 for i in range (0,5):
4     x=input()
5     arr1.append(x)
6 for i in range (0,5):
7     y=int(input())
8     arr2.append(y)
9 max = 0
10 for i in range (0,5):
11     if (arr2[i]>max):
12         max =arr2[i]
13 n=arr2.index(max)
14 print(arr2[n])
15 print(arr1[n])
```

	Input	Expected	Got	
✓	Amit Bratin Sandip Sundar Patrick 89 90 45 67 82	90 Bratin	90 Bratin	✓
✓	Amit Bratin Sandip Sundar Patrick 34 48 23 16 45	48 Bratin	48 Bratin	✓

Question **4**

Correct

Mark 1.00 out of 1.00

Given a list and we have to find the index/position of minimum and maximum elements of a list in Python.

```
if list = [10, 1, 2, 20, 3, 20]
```

then it must print

1

20

First line of input is no of elements in a list

Followed by n inputs one by one.

Output line 1 contains index of minimum element

Output line 2 contains index of maximum element

Note: if more than one element is minimum / maximum then first index will be considered.

For example:

Input	Result
3	0
10	1
20	
15	

Answer: (penalty regime: 0 %)

```
1 n=int(input())
2 list=[]
3 min=0
4 max=0
5 min_index=0
6 max_index=0
7 count=-1
8 for i in range(n):
9     ele=int(input())
10    if(min==0):
11        min=ele
12        list.append(ele)
13    for ele in list:
14        count+=1
15        if(ele>max):
16            max_index=count
17            max=ele
18        elif(ele <min):
19            min_index=count
20            min =ele
21 print(min_index)
22 print(max_index)
```

	Input	Expected	Got	
✓	3 10 20 15	0 1	0 1	✓
✓	5 12 15 85 65 11	4 2	4 2	✓
✓	6 6 5 4 3 2 1	5 0	5 0	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

You are given an array of N integers, A_1, A_2, \dots, A_N and an integer K. Return the of count of distinct numbers in all windows of size K.

Input :

1 2 1 3 4 3

3

Output :

2

3

3

2

Explanation

All windows of size K are

[1, 2, 1]

[2, 1, 3]

[1, 3, 4]

[3, 4, 3]

Answer: (penalty regime: 0 %)

```

1 n=input()
2 n=n.split(" ")
3 list1=[]
4 for li in n:
5     list1.append(int(li))
6 k=int(input())
7 length=len(list1)
8 for i in range(length-k+1):
9     arr=[]
10    for j in range(0,k):
11        arr.append(list1[i+j])
12    print(len(set(arr)),sep=" ")

```

	Input	Expected	Got	
✓	1 2 1 3 4 3 3	2 3 3 2	2 3 3 2	✓