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**State** Finished

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**Time taken** 24 mins 35 secs

**Marks** 5.00/5.00

**Grade** 50.00 out of 50.00 (100%)

**Name** [JEESHAN R J 2022-CSD-A](#)

## Question 1

Correct

Mark 1.00 out of 1.00

Create a program that reads integers from the user until a -99 is entered. Once all of the integers have been read your program should display all of the negative numbers, followed by all of the zeros, followed by all of the positive numbers. Within each group, the numbers should be displayed in the same order that they were entered by the user. For example, if the user enters the values 3, -4, 1, 0, -1, 0, and -2 then your program should output the values -4, -1, -2, 0, 0, 3, and 1. Your program should display each value on its own line. (-99 is not included in the final display)

Sample Input

0  
5  
10  
-15  
-20  
-99

Sample Output

-15  
-20  
0  
5  
10

For example:

Input	Result
0	-15
5	-20
10	0
-15	5
-20	10
-99	

Answer: (penalty regime: 0 %)

```
1 x=int(input())
2 n=0
3 arr=[0]
4 while(x!=-99):
5     arr[n]=x
6     x=int(input())
7     arr.append(x)
8     n=n+1
9 t=0
10 for i in range(0,n):
11     for j in range(i,n):
12         if(arr[i]>arr[j]):
```

```

13         t=arr[i]
14         arr[i]=arr[j]
15         arr[j]=t
16 t=arr[0]
17 arr[0]=arr[1]
18 arr[1]=t
19 for k in range(0,n):
20     print(arr[k])

```

	Input	Expected	Got	
✓	0	-15	-15	✓
	5	-20	-20	
	10	0	0	
	-15	5	5	
	-20	10	10	
	-99			
✓	10	-40	-40	✓
	20	-50	-50	
	30	0	0	
	-40	10	10	
	-50	20	20	
	0	30	30	
	-99			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

An array is monotonic if it is either **monotone increasing** or **monotone decreasing**.

An array A is monotone increasing if for all  $i \leq j$ ,  $A[i] \leq A[j]$ . An array A is monotone decreasing if for all  $i \leq j$ ,  $A[i] \geq A[j]$ .

Write a program if n array is monotonic or not. Print "True" if is monotonic or "False" if it is not. Array can be monotone increasing or decreasing.

Input Format:

First line n-get number of elements

Next n Lines is the array of elements

Output Format:

True ,if array is monotone increasing or decreasing.

otherwise False is printed

Sample Input1

4

5

6

7

8

Sample Output1

True

Sample Input2

4

6

5

4

3

Sample Output2

True

Sample Input 3

4

6

7

8

7

Sample Output3

False

**For example:**

Input	Result
4 6 5 4 3	True

**Answer:** (penalty regime: 0 %)

```

1 n=int(input())
2 l=[]
3 for i in range (0,n):
4     a=int(input())
5     l.append(a)
6 c=0
7 for i in range(0,n-1):
8     if(l[i]>l[i+1]):
9         c=c+1
10 c1=0
11 for i in range(0,n-1):
12     if(l[i]<l[i+1]):
13         c1=c1+1
14 if(c+1==n or c1+1==n):
15     print("True")
16 else:
17     print("False")

```

	Input	Expected	Got	
✓	4 6 5 4 3	True	True	✓
✓	4 3 5 7 9	True	True	✓
✓	4 1 6 9 2	False	False	✓
✓	4 9 6 4 2	True	True	✓
✓	3 2 1 4	False	False	✓

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

Write a Python program that takes two lists and returns True if they have at least one common member.

First line of input contains List 1

Second line of input contains List 2

Output is True if there is atleast one common element, false if no common elements

For example:

Input	Result
10 20 30 40 50 12 25 85 40 21	True

Answer: (penalty regime: 0 %)

```

1 a=input()
2 b=input()
3 l1=list(a.split(" "))
4 l2=list(b.split(" "))
5 c=0
6 for i in l1:
7     for j in l2:
8         if i==j:
9             c=c+1
10 if(c!=0):
11     print("True")
12 else:
13     print("False")

```

	Input	Expected	Got	
✓	10 20 30 40 50 12 25 85 40 21	True	True	✓
✓	1 2 3 4 5 7 8 9 10 11	False	False	✓
✓	10 20 30 20 20 30	True	True	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.



## Question 5

Correct

Mark 1.00 out of 1.00

Write a program that reads integers from the user and stores them in a list. Your program should continue reading values until the user enters 0. Then it should display all of the values entered by the user (except for the 0) in ascending order, with one value appearing on each line. Use either the sort method or the sorted function to sort the list.

Sample Input

```
20
30
40
50
10
0
```

Sample Output

```
10
20
30
40
50
```

For example:

Input	Result
20	10
30	20
40	30
50	40
10	50
0	

Answer: (penalty regime: 0 %)

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

	Input	Expected	Got	
✓	20	10	10	✓
	30	20	20	
	40	30	30	
	50	40	40	
	10	50	50	
	0			
✓	22	11	11	✓
	33	22	22	
	44	33	33	
	11	44	44	
	55	55	55	
	0			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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