RE : Test 3-Feb-2017 (2)

Amit Kumar 1 Hours Paper 4:00 PM-5:00 PM Python – Daily Test 8 – 3-Feb-17 (Loops or Iterative or Repetitive Statements) 1. Write the program in Python to perform the following: · Take three empty lists to store integers, floats and strings. · To accept user input (integers or float or strings) continuously until user either enters zero or “end” or “END” (zero, “end” or “END” signifies end of input) · As per the input in the previous step add to respective list · Once user enters all the inputs,
Today at 2:03 PM
Amit Kumar <amit.kumar@votarytech.com>
To
'Amit Kumar '
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1 Hours Paper 4:00 PM-5:00 PM

Python - Daily Test 8 - 3-Feb-17 (Loops or Iterative or Repetitive Statements)

1. Write the program in Python to perform the following:

* Take three empty lists to store integers, floats and strings.

* To accept user input (integers or float or strings) continuously until user either enters zero or "end" or "END" (zero, "end" or "END" signifies end of input)

* As per the input in the previous step add to respective list

* Once user enters all the inputs, display the lists of integers, floats and strings.

NOTE: Should not use condition as True (infinite loop), use proper condition only.

2. Write a program in Python to perform the following:

Given a number num, find the last non-zero digit in num!

Examples:

Input : num = 5

Output : 2

5! = 5 * 4 * 3 * 2 * 1 = 120

Last non-zero digit in 120 is 2.

Input : num = 33

Output : 8

NOTE: Don't use functions and infinite loops

3. Write a program in Python to perform the following:

* Accept user input of +ve and -ve values and store it in list, say mylist (End with 0 or number of numbers)

* Move all negative elements to end.

Given an unsorted list having both negative and positive integers. The task is place all negative element at the end of list without changing the order of positive element and negative element.

Examples (Code should be generic, this is just an example)

Input : mylist = [1, -1, 3, 2, -7, -5, 11, 6]

Output : [1 3 2 11 6 -1 -7 -5]

Input : mylist = [-5, 7, -3, -4, 9, 10, -1, 11]

Output : [7 9 10 11 -5 -3 -4 -1]

NOTE: Don't use functions and infinite loops

4. Program of Rotate and Delete.

Now we have problem with numbers. Take a list of numbers in which two types of operations allowed which is rotation and deletion. The process of doing these 2 operations are that first rotate the list in clockwise direction then delete the last element. In short rotate the list nth times and then deletes the nth last element. If the nth last element does not exists then delete the first element present in the list. So your task is to find out which is the last element that we delete from the list so that the list becomes empty after removing it.

For example, take list as

A = [1,2,3,4,5,6]

Rotate the list clockwise i.e. after rotation the list becomes A = [6,1,2,3,4,5] and delete the last element that is "5" so A = [6,1,2,3,4]. Again rotate the list for the second time and deletes the second last element that is "2" so A = [4,6,1,3], doing these steps when we reach 4th time, 4th last element does not exists so delete 1st element i.e., "1" so A={3,6}. So continuing this procedure the last element in A is "3", so o/p will be 3.

Example:

Input

list = [1 2 3 4 5 6]

1. Rotate ==> [6, 1, 2, 3, 4, 5]

2. Delete (last) ==> [6, 1, 2, 3, 4]

3. Rotate ==> [4, 6, 1, 2, 3]

4. Delete (2nd last) ==> [4, 6, 1, 3]

5. Rotate ==> [3, 4, 6, 1]

6. Delete (3rd last) ==> [3, 6, 1]

7. Rotate ==> [1, 3, 6]

8. Delete (4th last) ==> No 4th Last, so delete 1st element ==> [3, 6]

9. Rotate ==> [6, 3]

10. Delete (5th last) ==> No 5th last element, so delete 1st element, 6, now list becomes ==> 3

Output:

3

Input

list = [1 2 3 4]

Rotate ==> [4 1 2 3]

Delete (last) ==> [4 1 2]

Rotate ==> [2 4 1]

Delete (2nd last) ==> [2 1]

Rotate ==> [1 2]

Delete (3rd last, no 3rd last, so delete 1st element 1) ==> Result 2

Output

2

NOTE:

1. Don't use function and infinite loops

2. Code should be generic but can directly assign the list as required, say mylist = [1, 2, 3, 4, 5, 6]

3. The exception raised when trying to delete an element of an index which is not present is IndexError. Say, example mylist = [1, 3, 6] and trying to delete -4 element, which is not present. So, it would raise exception IndexError.