# **SEQUENTIAL OUTPUT TRACING (INPUT)**

# Contents

## **1.1.13 SEQUENTIAL OUTPUT TRACING (INPUT)**

In this type of questions, a message comprising of randomized words or numbers is given as the input followed by steps of rearrangement to give sequential outputs. The candidate is required to trace out the pattern in the given rearrangement and then determine the desired output step, accordingly as asked in the question.

#### Example:

Study the following information carefully and answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input	:	51 pour 32 start now 23 46 house
Step I	:	23 51 pour 32 start now 46 house
Step II	:	23 start 51 pour 32 now 46 house
Step III	:	23 start 32 51 pour now 46 house
Step IV	:	23 start 32 pour 51 now 46 house
Step V	:	23 start 32 pour 46 51 now house
Step VI	:	23 start 32 pour 46 now 51 house

And Step VI is the last step of the rearrangement.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

#### **Q1**. **Step II** of an input: 18 task bear cold dish 81 63 31

How many more steps will be required to complete the rearrangement?

	1) Three	2) Four	3) Five
--	----------	---------	---------

4) Six	5) None of these

### **Q2**. **Input:** 72 59 37 go for picnic 24 journey

How many steps will it take to complete the rearrangement?

1) Three	2) Four	3) Five
4) Six	5) None of	these

Q3. Step III of an input is: 15 yes 29 ask for soap 42 37

Which of the following is definitely the input?

- 1) ask yes 29 15 for soap 42 37
- 2) yes ask 15 29 for soap 42 37
- 3) 29 15 yes ask for soap 42 37
- 4) Cannot be determined
- 5) None of these

#### Answer:

In step I the least number come to the leftmost position, pushing the rest of the line rightward. In step II the word that comes last in the alphabetical order shifts to second form left, pushing again the rest of the line rightward. Similarly, in step III the second least number shifts to third from left. In step IV the second from last in alphabetical order comes to the fourth position. And this goes on alternately till all the numbers are arranged in ascending order and the words in reverse alphabetical order.

1) Answer is 3.
Step II : 18 task bear cold dish 81 63 31
Step III : 18 task 31 bear cold dish 81 63
Step IV : 18 task 31 dish bear cold 81 63
Step V : 18 task 31 dish 63 bear cold 81
Step VI : 18 task 31 dish 63 cold bear 81
Step VII : 18 task 31 dish 63 cold 81 bear
Hence 7-2=5 more steps will be required.

2) Answer is 4.

Input	:	72 59 37 go for picnic 24 journey
Step I	:	24 72 59 37 go for picnic journey
Step II	:	24 picnic 72 59 37 go for journey
Step III		24 picnic 37 72 59 go for journey
Step IV	:	24 picnic 37 journey 72 59 go for
Step V	:	24 picnic 37 journey 59 72 go for
Step VI	:	24 picnic 37 journey 59 go 72 for

**3)** Answer is 4. We cannot work out back.