# Short Method for Input Output Problems 

INPUT OUTPUT PROBLEMS<br>Consider the following problem<br>Input : Sale data 1823 for 95 then 38<br>Step I: data sale 1823 for 95 then 38<br>Step II: data 95 sale 1823 for then 38<br>Step III : data 95 for sale 1823 then 38<br>Step IV : data 95 for 38 sale 1823 then<br>Step V : data 95 for 38 sale 2318 then<br>Step VI : data 95 for 38 sale 23 then 18<br>And step VI is last step

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Now short approach to solve this is not to see whole pattern but directly see the last step. Generally it will arrange words according to dictionary in forward or reverse manner and digits also in ascending or descending form. It could be any pattern given by the examiner, but in almost all cases you will be able to figure out the pattern by watching the last step only

In this question we can see in last step that ENGLISH alphabets are in dictionary order starting from

A to Z and numbers are in descending order, so our half work is done... as we know the pattern of the arrangement i.e. first an english letter with higher order, then highest number, then english letter in ascending number, then number just less than highest number and so on.......

One more step is to see that words are arranged in each step by shifting or swaping

Shifting : shifting means tat desire numberor alphabet comes to its place and all the words and letters are shifted as it is after that word

For eg
data goat solo eat her zoo
now eat has to come before goat so we shift it as
data eat (goat solo her zoo) arranged as it is

Swapping : In this type one word is replaced by other one

For eg

## Data goat solo eat her zoo

We swap it as

## Data eat solo goat her zoo

(here eat and goat are interchanged)

## Now as per the present scenario we mostly have shifting type of pattern and we have a short trick for it to find answers of question

If it is given in question that Second step of input is so and so find fifth step, so in these question instead of solving it completely, we can see that if given step issecond step so AT LEAST two words are already arranged so look at the given stucture that if 2 or 3 or how many words are arranged after that instead of writing it step by step cut the words with PENCIL which are arranged and then cut the nextword which should come next and increase the counter of the steps i.e. step 3 in your mind, then cut next word that should come in the arrangement and increase step counter. One thing that is to be noted that is you should not worry about the arrangement that should come after shifting because after cutting the word in the arrangement, the uncut words will always make correct pattern after shifting.

In some cases the required word or number which is to be arranged is first letter in the first letter of the resulting arrangement, in this case we will cut tha word or number but we will not increase the step counter as we do not have to shift it anywhere, it was already at its place

For eg

It is given that first step of the arrangement is

## Data eat solo goat her zoo

Then according to the rule at least one word is already in its place i.e. data is in its correct place, now we check the next letter EAT, and we find that this too is on its correct place so 2 letters are already arranged

## solo goat her zoo (Step I)

so we first cut these words and proceed forward to check out next letter in the arrangement, and we find that next letter should be GOAT, so we cut it and increase the step counter so it will be our Step II.

## solo her zoo (Step II)

Then next word should be HER so we cut that letter and increase the counter by one and it becomes step number III

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solo zoo (Step III)
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After step III we find our next letter of the arrangementwhich should be SOLO, so we will cut that letter BUT COUNTER FOR STEP NUMBER WILL NOT INCREASE because it is already in its place. So we are still on step III.

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zoo (Step III)
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After this we will look out for next letter which is ZOO, so we will cut it and this time also we will not increase the step counter as it is also on its correct place.

## (Step III)

* Generally there is a question in which it is asked that step III or any step of the arrangement is so and so, then he asks any of the previous steps than step III or whichever step is given, step I or step II in this case. In these question the answer will be CANNOT BE DETERMINED.

Explanation : For these type of question answer will be CBD as we can see in above example also that the word which is to be arranged can come from any where i.e. its position could be anywhere in the given pattern before actual arrangement, we can see that goat comes before solo in the above example after actual arrangement, but in the provided input it was after SOLO, so position of any word cannot be determined in previous step and hence we cannot find pattern of previous step.

## I think i made myself very clear with this method.

