

## Machine Input-Output Questions and Answers

**Directions (Q1 - Q5):** Study the information given below carefully and answer the following questions: When a machine is given an input which includes a line of words and numbers, the output received is arranged in a particular manner. Given below is an illustration of input along with the steps followed to get its output

**Input: 34 lights ink 56 78 online defeat 99 orange range 87 22**

**Step I:** 22 34 lights ink 56 78 online 99 orange range 87 defeat

**Step II:** 34 22 lights 56 78 online 99 orange range 87 defeat ink

**Step III:** 56 34 22 78 online 99 orange range 87 defeat ink lights

**Step IV:** 78 56 34 22 99 orange range 87 defeat ink lights online

**Step V:** 87 78 56 34 22 99 range defeat ink lights online orange

**Step VI:** 99 87 78 56 34 22 defeat ink lights online orange range

And step VI is the final step of the above input. Now, based on the same pattern, find the output for the input given below.

**Input: 67 54 thankful message listing 23 45 known booklist 90 quit 88**

**Q 1.** How many steps will be required to get the final output?

1. Three
2. Eight
3. Seven
4. Six
5. Five

**Answer: (4) six**

**Q 2.** Which of these will be the 3rd step?

1. 54 45 23 67 thankful message 90 quit 88 booklist known listing
2. 45 23 54 67 thankful message 90 quit known listling booklist 88
3. 23 67 54 thankful message listing 45 known 90 quit 88 booklist
4. 23 67 54 thankful message listing 45 known 90 quit 88 booklist
5. 54 45 23 67 thankful 90 quit 88 message booklist known listing

**Answer: (1) 54 45 23 67 thankful message 90 quit 88 booklist known listing**

**Q 3.** What will be the 4th element from left in the 2nd step of the output?

1. Thankful
2. 45
3. 54
4. Quit

5. Booklist

**Answer: (3) 54**

**Q 4.** Which element will be sixth to the left of the 2nd element from right in Step VI?

1. 23
2. 88
3. 45
4. Booklist
5. Listing

**Answer: (3) 45**

**Q 5.** What is the position of the word “known” in Step II?

1. Right end of the line
2. Left end of the line
3. Second element from the left end of the line
4. Second element from the right end of the line
5. None of the above

**Answer: (1) Right end of the line**

**Solution:**

Based on the input given in the question, it can be analysed that by the final step the all the numbers are arranged in descending order in the beginning of the line and then all the words are arranged in the dictionary-order.

Similarly, the output can be found for

**Input: 67 54 thankful message listing 23 45 known booklist 90 quit 88**

**Step I:** 23 67 54 thankful message listing 45 known 90 quit 88 booklist

**Step II:** 45 23 67 54 thankful message listing 90 quit 88 booklist known

**Step III:** 54 45 23 67 thankful message 90 quit 88 booklist known listing

**Step IV:** 67 54 45 23 thankful 90 quit 88 booklist known listing message

**Step V:** 88 67 54 45 23 90 quit booklist known listing message thankful

**Step VI:** 90 88 67 54 45 23 booklist known listing message thankful quit

**Directions (Q6 - Q10):** A machine input rearrangement is given below. Study and analyse the input and its steps and answer the following questions:

**Input: 32 55 65 78 90 34 21 44 61 91 77**

**Step I:** 12 32 55 65 78 90 34 44 61 77 19

**Step II:** 23 12 55 65 78 34 44 61 77 19 09

**Step III:** 43 23 12 55 65 44 61 77 19 09 87

**Step IV:** 44 43 23 12 55 65 61 19 09 87 77

**Step V:** 55 44 43 23 12 61 19 09 87 77 56

**Step V:** is the final step for the above input. Now, following a similar pattern, find output for the given input.

**Input: 76 67 84 70 33 32 21 12 34 97 28**

**Q 6.** Which will be the second number from the right end of the line in Step III?

1. 23
2. 43
3. 79
4. 48
5. 07

**Answer: (4) 48**

**Q 7.** How many steps shall be required to find the final answer?

1. Three
2. Four
3. Six
4. Seven
5. Five

**Answer: (5) five**

**Q 8.** Which of these is Step V?

1. 33 23 82 12 21 34 79 48 67 07 76
2. 82 12 21 67 70 33 32 34 79 48 67
3. 33 32 28 12 21 34 97 84 76 70 67
4. 97 84 76 70 67 33 32 82 12 21
5. None of the above

**Answer: (1) 33 23 82 12 21 34 79 48 67 07 76**

**Q 9.** Which is the 5th number in Step I from the left end of the line?

1. 33
2. 32
3. 21
4. 70
5. 97

**Answer: (4) 70**

**Q 10.** Which step is “82 12 21 67 70 33 32 34 79 48 67”?

1. Step V
2. Step III
3. Step IV

4. Step I
5. Step II

**Answer: (2) Step III**

**Solution:**

Based on the input-output given in the questions, the pattern followed is the smallest number in the input is placed at the first position from left end and the largest number is placed at the right end of the line and then the digits interchange their position. For eg - 21 becomes 12 and 91 becomes 19

Similarly, for the input:

**Input: 76 67 84 70 33 32 21 12 34 97 28**

**Step I: 21 76 67 84 70 33 32 21 34 28 79**

**Step II: 12 21 76 67 70 33 32 34 28 79 48**

**Step III: 82 12 21 67 70 33 32 34 79 48 67**

**Step IV: 23 82 12 21 67 33 34 79 48 67 07**

**Step V: 33 23 82 12 21 34 79 48 67 07 76**

Step V is the final step.

**Directions (Q11 - Q15):** Analyse the data given below and answer the following questions:

**Input: box books balloon begin blossom bloom back belong**

**Step I:** blossom box books balloon begin bloom back belong

**Step II:** bloom blossom box books balloon begin back belong

**Step III:** box bloom blossom books balloon begin back belong

**Step IV:** books box bloom blossom balloon begin back belong

**Step V:** begin books box bloom blossom balloon back belong

**Step VI:** belong begin books box bloom blossom balloon back

**Step VII:** balloon belong begin books box bloom blossom back

**Step VIII:** back balloon belong begin books box bloom blossom

Based on this, find the output for the input given below.

**Input: rural ride revise rotate rule race rabbit register**

**Q 11.** How many steps are required to get the final output?

1. Eight
2. Nine
3. Seven
4. Six
5. Ten

**Answer: (3) seven**

**Q 12.** What is the 3rd word from the left in step VI?

1. Register
2. Race
3. Rabbit
4. Revise
5. Rural

**Answer: (1) register**

**Q 13.** What is the position of “rural” in Step III?

1. 2nd from the right end
2. 4th from the left end
3. 4th from the right end
4. 3rd from the left end
5. Exactly in the centre of the line

**Answer: (2) 4th from the left end**

**Q 14.** Which word is second to the right of fifth word from the left in Step VI?

1. Rotate
2. Rabbit
3. Race
4. Rural
5. Ride

**Answer: (4) rural**

**Q 15.** Which step is “revise ride rotate rule rural race rabbit register”?

1. Step VI
2. Step V
3. Step IV
4. Step II
5. Step III

**Answer: (3) Step IV**

**Solution:**

Based on the output given in the questions, the final step has all the words arranged in dictionary format

Similarly,

**Input: rural ride revise rotate rule race rabbit register**

**Step I:** rule rural ride revise rotate race rabbit register

**Step II:** rotate rule rural ride revise race rabbit register

**Step III:** ride rotate rule rural revise race rabbit register

**Step IV:** revise ride rotate rule rural race rabbit register

**Step V:** register revise ride rotate rule rural race rabbit

**Step VI:** race register revise ride rotate rule rural rabbit

**Step VII:** rabbit race register revise ride rotate rule rural

Step VII is the last step.

**Directions (Q16 - Q20):** A machine rearrangement gave input with both numbers and words in a particular set of rules in step by step. Based on the input given below, answer the questions following it.

**Input:** glass 12 42 kite lights 66 numbers 11 68 pilot

**Step I:** 68 pilot glass 12 42 kite lights 66 numbers 11

**Step II:** 66 numbers 68 pilot glass 12 42 kite lights 11

**Step III:** 42 kite 66 numbers 68 pilot glass 12 lights 11

**Step IV:** 12 lights 42 kite 66 numbers 68 pilot glass 11

**Step V:** 11 glass 12 lights 42 kite 66 numbers 68 pilot

And Step V is the last step

Now, based on the above machine arrangement, solve the input given below:

**Input:** 23 height pencil 54 89 wage loop 61 92 merge

**Q 16.** Which of the following is the last step?

1. 92 wage 23 height pencil 54 89 loop 61 merge
2. 23 height 54 loop 61 merge 89 pencil 92 wage
3. 89 pencil 92 wage 23 height 54 loop 61 merge
4. 61 merge 89 pencil 92 wage 23 height 54 loop
5. 54 loop 61 merge 89 pencil 92 wage 23 height

**Answer: (2) 23 height 54 loop 61 merge 89 pencil 92 wage**

**Q 17.** How many steps are required get the final result?

1. Six
2. Seven
3. Three
4. Four
5. Five

**Answer: (5) five**

**Q 18.** What is the 3rd element from left in Step III?

1. Pencil
2. Height
3. 89
4. 61
5. Wage

**Answer: (3) 89**

**Q 19.** Which of these is the 2nd step?

1. 61 merge 89 pencil 92 wage 23 height 54 loop
2. 89 pencil 92 wage 23 height 54 loop 61 merge
3. 89 wage 92 loop height 23 54 merge 61 pencil
4. None of the above
5. Cannot be determined

**Answer: (2) 89 pencil 92 wage 23 height 54 loop 61 merge**

**Q 20.** In step IV, which is the 3rd element to the left of the 3rd element from right?

1. Wage
2. Pencil
3. 61
4. 54
5. 89

**Answer: (5) 89**

**Solution:**

Based on the input-output given in the questions, in the final, the numbers and words are alternatively arranged with numbers in ascending order and words in dictionary-format

Input: 23 height pencil 54 89 wage loop 61 92 merge

Step I: 92 wage 23 height pencil 54 89 loop 61 merge

Step II: 89 pencil 92 wage 23 height 54 loop 61 merge

Step III: 61 merge 89 pencil 92 wage 23 height 54 loop

Step IV: 54 loop 61 merge 89 pencil 92 wage 23 height

Step V: 23 height 54 loop 61 merge 89 pencil 92 wage

And step V is the final step.

**Directions (Q21 - Q24):** Study the information given below and answer the following questions:

**Input: treat win celebrate house game sports trophy**

**Step I:** win treat celebrate house game sports trophy

**Step II:** win trophy treat celebrate house game sports

**Step III:** win trophy treat sports celebrate house game

**Step IV:** win trophy treat sports house celebrate game

**Step V:** win trophy treat sports house game celebrate

And Step V is the final step.

Based on the pattern followed above, find the output for the given input:

**Input: green yellow blue orange red purple white**

**Q 21.** How many steps are required to get the final output?

1. Six
2. Seven
3. Five
4. Four
5. Nine

**Answer: (3) five**

**Q 22.** Which word is exactly in between orange and purple in step II?

1. Red
2. White
3. Yellow
4. Blue
5. Green

**Answer: (1) red**

**Q 23.** What is the position of yellow in Step IV?

1. 3rd from left end
2. 3rd from right end
3. 4th from left end
4. 2nd from left end
5. Extreme right end

**Answer: (4) 2nd from left end**

**Q 24.** Which of these will be Step II?

1. white yellow green blue orange red purple
2. white yellow blue green orange purple red
3. Yellow white blue green orange red purple
4. Red purple blue green white yellow orange
5. Orange white yellow green blue red purple

**Answer: (1) white yellow green blue orange red purple**

**Solution:**

Based on the last step of the given output, the words are arranged in the descending order of dictionary format

Accordingly,

**Input: green yellow blue orange red purple white**

**Step I:** white green yellow blue orange red purple

**Step II:** white yellow green blue orange red purple

**Step III:** white yellow red green blue orange purple

**Step IV:** white yellow red purple green blue orange



**Step V:** white yellow red purple orange green blue

Interested aspirants can also check the various other logical reasoning concepts in the links mentioned below:

<a href="#">Seating Arrangement</a>	<a href="#">Reasoning Puzzles</a>
<a href="#">Alphanumeric Series</a>	<a href="#">Blood Relations</a>
<a href="#">Direction Test</a>	<a href="#">Calendars</a>