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Step I: 36 38 763 978 439 628 952 625
Step II: 48 48
Step III: 63 42 42 48
Step IV: 28 733 63 42 48
Step V:12
Step VI: 12 14 14
Step VI is the final out-put of given input.
As per rules followed in the given steps, find appropriate step for given Input.
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$\begin{array}{llllllll}\text { Input: } 962 & 625 & 271 & 846 & 738 & 981 & 463 & 624\end{array}$

1. Which of the following number is fourth from left end from step III?
2. Which of the following is final output of given input?
$\begin{array}{llllllll}\text { A. } 14 & 16 & 23 & 26 & 29 & 31 & 34 & 45\end{array}$
$\begin{array}{llllllll}\text { B. } 14 & 16 & 22 & 26 & 28 & 31 & 34 & 45\end{array}$
$\begin{array}{llllllll}\text { C. } 14 & 22 & 26 & 28 & 31 & 34 & 45 & 61\end{array}$
D. $141622 \quad 26 \quad 28 \quad 313645$
E. None of these
3. Which of the following number is third from right end from step II?
A. 846
B. 26
C. 962
D. 625
E.None of these
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\begin{array} { l l l l l l l l l } { \text { Input: 962} } & { 6 2 5 } & { 2 7 1 } & { 8 4 6 } & { 7 3 8 } & { 9 8 1 } & { 4 6 3 } & { 6 2 4 } \\ { \text { Step I: 26 } } & { 4 4 } & { 9 6 2 } & { 6 2 5 } & { 8 4 6 } & { 7 3 8 } & { 9 8 1 } & { 4 6 3 } \end{array}
Step II: 48 43 43 26 44 962 625
Step III: 63 46 48
Step IV: 32 97 63 46 48
Step V: 26 34 45
Step VI: 14 16 22 26 28 31 34 45
Explanation
We have:
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Input: 588 763 978 317 439 628
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Input: 588 763 978 317 439 628
For step I: Smallest odd number is kept at beginning followed by smallest even number following two different condition for odd and even number.
Case (1) For an odd number:- difference of last two digits ate taken.
For example:- 317 -> 36
Case (2) For an even number:- difference of first two digits are taken.
For example:- 588 -> 38
Step I: 36 38
For step II: Second smallest number is kept at beginning followed by second smallest odd number following same condition for odd and even number.
Step II:48 46 36 36 38
Follow the above condition until all the above numbers are rearranged.
For step V: Difference of two digit number and product of digits are taken.
For Example:- 28-16 = 12
Step V: 12 52 42 45}34
For Step VI: All the numbers from step V are rearranged in ascending order.
Step VI: 12 14 14 14 18 22 34 45

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Input: B \& M 42 \# H @ 3 P 9 U 7 * V 6 Z K Q 5 \% ^ T 18 Y \$ S
Step I: B \& 8Y2 \# H @ 3 P 9 U \(\mathbf{7}^{*}\) V 6 ZK Q 5 \% ^ T 1 M 4 \$ S
Step II: B \& 8 Y 2 \# \% ^ 3 P 9 U 7 *V 6 ZKQ5H@T1M4\$S
4. Based on the above step-by-step rule followed in each step find how many letters are immediately preceded by a symbol as well as immediately followed by a digit in step II of the below-given input?

Input: B \& H @ * V 6 Z 3 P 2 \# \% ^ T 1 U 7 K Q 58 Y 9 M 4 \$ S
A. Two
B. One
C. None
D. More than three
E. Three
5. Which of the following element is fourth from the left end in step IV?
A. Wish
B. 14
C. Hs\%x
D. \#\&s@
E. None of these
6. Which of the following correctly represent step III?
A.N\%sf 14 Hs\%x 981 Wish 928 Rest 18 \#\&s@ 15
B.N\%s@ 41 Hs\%x 981 Wish 928 Rest 18 \#\&s@ 15
C.N\%s@ 14 Hs\%x 981 Wish 928 Rest 18 \#\&s@ 15
D.N\%s@ 14 Hs\%x 15 Wish 928 Rest 981 \#\&s@ 18
E. None of these
7. Which of the following element is sixth from the right end in step V?
A. 18
B. \(\mathrm{Hs} \% \mathrm{x}\)
C. 18
D. \#\&s@
E. None of these
8. What is the sum of the lowest and highest number in step V?
A. 98
B. 87
C. 76
D. 79
E. None of these.

\section*{Explanatior}

We have:
Symbol: Vowels are coded as symbols in such a way that:-
A ->\&, e -> @, I -> \#, \(0->\%\), and U \(->\) \$
Numbers: Case (1):- If the number is odd then the product of the first two digits is added to the third digit.
Case (2):- If the number is an even number then the product of the last two digits is added to the first digit.
Letters: Consonants are changed to the next letter of the English alphabetical series and thus all the vowels are replaced by symbols.
Again, the rule followed in each step:
Step I: a word with the smallest first letter in alphabetical order is placed at the extreme left end and a number whose digital sum is lowest is placed at the right end.
Step II: a word with the second smallest first letter in alphabetical order is placed at the extreme right end and a number whose digital sum is second-lowest is placed at the extreme left end.
Follow the same rule step by step till all the words and letters are arranged.
Based on the above-given step by step rule we have:
Input: More 981 Wish 634816 Hard Grow 928 Rest817
Step I: Hs\%x More 981 Wish 816 Hard 928 Rest 81718
Step II: 14 Hs\%x More 981 Wish 928 Rest 81718 \#\&s@
Step III: N\%s@ 14 Hs\%x 981 Wish 928 Rest 18 \#\&s@ 15
Step IV: 73 N\%s@ 14 Hs\%x Wish 92818 \#\&s@ 15 S@t\$
Step V: X\# t \# 73 N\%s@ 14 Hs\%x 18 \#\&s@ 15 S@t\$ 25

Step I: 693857267429483837
Step II: 267429483693837857
Step III: 191735573147
Step IV: 171931354757
Step V: 25935275845
Input: 496329874723928469
9. Which of the following number is third from the right end in the penultimate step?
A. 33
B. 17
C. 31
D. 28

\section*{E.None of these}

Answer: A
10. What is the difference between the second lowest and second highest numbers from step II?
A. 426
B. 421
C. 428
D. 374
E. 420

Answer: B
11. Which of the following element is third from the left end of step \(V\) ?
A. 27
B. 32
C. 36
D. 58
E.None of these

Answer: B
12. Which of the following step represents step I?
A. 693857429483267837
B. 963857267429483837
C. 693587267429483837
D. 693857267249483837
E. None of these

Answer: E

\section*{Input: 496329874723928469}

\section*{Step I: 694239478273829649}

\section*{Step II: 239273478649694829}

\section*{Step III: 151736335825}

\section*{Step IV: 151725333658}

\section*{Step V: 21932274545}

Step I:
Case (1): If the 3 -digit number is even, then interchange \(1^{\text {st }}\) and \(3^{\text {rd }}\) digit within the number.
For Example \(396->693\)
Case (2): If the 3 -digit number is odd, then interchange \(1^{\text {st }}\) and \(2^{\text {nd }}\) digit within the number. For Example \(587->857\)
For step II: All the numbers thus formed in step I are rearranged in ascending order from left to right.
For step III: Sum of the product of \(1^{\text {st }}\) and \(2^{\text {nd }}\) digits is taken along with the \(3^{\text {rd }}\) digit.
For Example: \(267->(2 \times 6)+7=19\)
For Step IV: all the numbers thus formed in step III are rearranged in ascending order from left to right. For Step V: The digital sum of the numbers are added and subtracted respectively from left to right. For example:
1. \(17->(17+8)=25\)
2. \(19->(19-10)=9\)

\section*{Input: Strong Control Reduce Language Logical Traffic}

Step I: __(A)__colnroteeucdraaeuggln_(B)__cfafrit

Step III: 仓@kg@\&_(D)_\&\&C\&Og ®®\&®@@mK ®®\&@q仓q ®w®wk@@

13. What comes in place of \(\qquad\) (E) \(\qquad\) ?
A. \(\left.68^{\circledR} \&{ }^{\circledR} @\right\rangle\)
B. \(68^{\circledR ®}\) \&@
C. \(86^{\circledR ®} \& @\)
D. \(68^{\circledR}{ }^{\circledR}\) \&
E.None of these

Answer: B
14. What comes in place of __(C)_?
A. \({ }^{\otimes}{ }^{\circledR}{ }^{\bullet} \& \& \mathrm{gl}\)
B. \({ }^{\bullet \bullet \& © \& \& h g ~}\)
C. \({ }^{\text {®® }}\) © 0 @gl
D.®®\&@@@np
E.None of these

Answer: D
15. What comes in place of __(B)_?
A.cagliol
B.cagilol
C.cgailol
D.cagikol
E.None of these

Answer: B
16. What comes in place of \(\qquad\) (D) ?

\section*{A. \({ }^{\bullet}\) @jlper}

\section*{}

\section*{}

\section*{D. \({ }^{\bullet} \geqslant \mathrm{j}|\mathrm{p}\rangle \mathrm{p}\)}

\section*{E. None of these}

\section*{Answer: B}

\section*{For step I:}

Case (1):- If the number of letters in the words is even then, arrange the vowels followed by consonants in alphabetical order.
Example:- Strong -> ognrst
Case (2):- If the number of letters in the words is odd then, arrange consonants in alphabetical order and vowels in alphabetical order while remaining in the same position.
For step II:
Case (1):- If the word starts with a vowel then change consonants to the second next letter of the English alphabetical series.
Case (2):- If the word starts with a consonant then change consonants to the second preceding letter of the English alphabetical series
After following steps change vowels with different symbols as follows:

For step III: If letters in the words are changed to opposite letters according to the alphabetical series and if there is any vowel then vowels are changed to symbols as it was done in step II.
For step IV: the sum of the place value of letters is taken and multiplied with the number of symbols in the word which repeats maximum time and the result is written at the start of the series.

INPUT: B 4 SK @ J 3 * TRUF^ + WI 62 \# H STEP 1: RT*3J @ K S 4 BUF^ + WI 62 \# H STEP 2: RT*3J @ K S \(42 \mathrm{U}^{\wedge}\) ^ + W 962 \# 8 STEP 3: RT*22J@K34SU^66+W\#89 STEP 4: SU* 22 K @L34TV^66+X\#89 STEP 5: SU 22 KL 34 TV 66 X8 \(9^{*} @ \wedge+\#\) STEP 6: XVUTSLK22346689* @^+\# INPUT: N 4 J * \& SF3 \# 9H5^7 + U \$RG @
17. Which of the following element is third to the left of fifth from the right end in step 2 of the given input?
A. 5 B. ^ C. 7 D. + E. N
18. In step 3 of the given input, if all the symbols are dropped and comparing with the English alphabets from right to left (S tarting from A ), which of the following letter remains unchanged in its position? A. U B. N C. S D. J E. R
19. What will be the resultant, if the fifth element to the right and left of \(V\) is multiplied in step 5 of the given input?
A. 27 B. 40 C. 36 D. 32 E. 35
20. What will be the square root of the sum of all the numbers in the last step of the given input?
A. 7 B. 9 C. 6 D. 8 E. 5

In step 1, the first 10 elements are placed in the reverse order.
In step 2, the letters before J in English alphabetical order are replaced with their corresponding numbers. In step 3, all the numbers are arranged in ascending order and place every two numbers after three elements in the series.
In step 4, all the letters are replaced by the immediate next letter in the English alphabetical order. In step 5, all the symbols are placed at the end of the series in the given order. In step 6, all the letters are arranged in reverse alphabetical order from the left end followed by the numbers and symbols in the same order.
\[
\begin{aligned}
& \text { INPUT: N } 4 \text { J * \& SF } 3 \text { \# } 9 \text { H } 5^{\wedge} 7+\text { U\$RG @ } \\
& \text { STEP 1: 9 \# 3 F S \& * J 4 N H 5 ^ 7 + U \$R G @ } \\
& \text { STEP 2: } 9 \text { \# } 36 \text { S \& *J } 4 \text { N } 85^{\wedge} 7+\text { U \$R7 @ } \\
& \text { STEP 3: \# S \& } 34^{*} \text { JN } 56^{\wedge}+\mathrm{U} 77 \text { \$R @ } 89 \\
& \text { STEP 4: \# T \& } 34^{*} \text { K O } 56^{\wedge}+\mathrm{V} 77 \$ \mathrm{~S} \text { @ } 89 \\
& \text { STEP 5: T } 34 \text { KO56V77S89\#\&*^+\$ @ } \\
& \text { STEP 6: VTSOK34567789\#\&*^+\$ @ }
\end{aligned}
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