

Date: 15 Jan 2021

Logic

- Q1. Accept 5 number in an array, accept a number from user and check if given number is there in an array or not
- Q2. Accept 5 number in an array and sort it (bubble sort)
- Q3. Accept 5 number in an array and sort it (selection sort)
- Q4. Accept 5 number in an array and sort it (insertion sort)
- Q5. Accept two set of array each having 5 element sort it and put it in new array
- Q6. Accept 5 number in an array, accept a number from user and check if given number is there in an array or not  
use binary search
- Q7. Accept 5 number in an array ( repeat numbers ) print unique array
- Q8. Accept data in 3\*3 matrix two times and do the sum of it
- Q9. Accept data in 4\*4 matrix and transpose it
- Q10. Accept data in 4\*4 matrix and check if it is magic square or not
- Q11. Accept data in 3\*3 matrix and print row wise and column wise total
- Q12. Accept 10 number in an array and print highest 3 number
- Q13. Accept 5 number in an array and display message entered data is in ascending/descending or not sorted
- Q14. Accept 10 digit number print longest ascending number  
a. Eg 2156897456 o/p 156897
- Q15. calculate sum of element at a particular index with each of its adjacent element and find out the max and minimum sum for example
- |   |   |   |   |   |
|---|---|---|---|---|
| 2 | 5 | 3 | 6 | 1 |
| 6 | 9 | 8 | 8 | 2 |
| 4 | 7 | 6 | 1 | 3 |
| 3 | 5 | 4 | 8 | 9 |
- if 2<sup>nd</sup> row and 3<sup>rd</sup> column number is 8 sum(8+9, 8+3, 8+8, 8+6) here max is 17 and min is 8+3=11
- Q16. Let user enter number 0 to 15 and you accept them as follows
- |   |    |    |    |
|---|----|----|----|
| 0 | 2  | 5  | 9  |
| 1 | 4  | 8  | 12 |
| 3 | 7  | 11 | 14 |
| 6 | 10 | 13 | 15 |
- Q17. take two array from the user separated by space atleast one of them should be of 20 in length. and none of them is more than 40 in length. and it should give the new o/p array followed by new line with sum of above array  
sample input : 999 11111111111111111111

o/p 11111111111111112110

Q18. Accept a data in 9\*9 matrix , element allowed is between 1 to 9 no duplicate value allowed row and column wise this 9\*9 matrix has 9 set of 3\*3 matrix and this 3\*3 matrix should not have repeated entry .

This is program of Sudoku

Q19. Accept data in 3\*3 matrix if any row has all 0 replace it with '#' and print the matrix

Input:

0	0	0
0	1	3
0	4	5

Output:

#	#	#
#	1	3
#	4	5

Input :

0	5	0
0	0	0
7	0	5

Output:

0	5	0
#	#	#
7	0	5

Input :

0	0	0
1	0	3
7	0	5

Output:

#	#	#
1	#	3
7	#	5