

Ans-1

1. START
2. create a function as countChar(array, size, k)
3. initialise count[k+1] = {0} & flag = 0
4. Take a loop as for (i=0; i < n; i++)
5. In the loop, increment count [array[i] - a]  
as ++count [array[i] - 'a']
6. End loop
7. Take a loop as for (ch = 'a'; ch <= 'z', ch++)
8. In the loop, if count[ch - 'a'] > 1, then flag++.
9. End loop
10. maximum = count[0]
11. Take a loop, for (i=1; i < k; i++)
12. In the loop, if count[i] > maximum  
then, maximum = count[i];  
and key = i
13. End loop
14. If flag == 0 then print no duplicate present.
15. Else print (char) (key + 97) and maximum;

Ans-2 Algorithm

1. First sort the array using sorting algorithm.
2. Then initialise the k = size - 1 & j = 0 & flag = 0.
3. Take a while loop as (j < n/2 & k >= n/2)
4. In loop
  - if (array[j] + array[k] == num)
  - then k--;

- else  
     $j++$ ;

- if (array[j] + array[k] == num)  
    then print array[j] and array[k] & flag++;

5. End loop

6. If flag = 0

    then print no such pair exist.

7. STOP

Ans-3. algorithm

1. Take a for loop as ( $i=0; i < m; i++$ )

2. In loop

    - initialise flag = -1

    - take a for loop as ( $j=0; j < n; j++$ )

    - In loop

        - if (array-1[i] == array-2[j])  
            then,

            - if (array-2[j] == flag)  
                then continue;

        - else

            - print array-1[i]

            - flag = array-1[i]

    - end loop

3. End loop

4. STOP