

**Task 02 (Repetition + List 30-08-2022)**

Consider this array for next four questions:

`d=[9,10,23,15,47,2,29,36,58,14,30,16,90,40,83]`

1. Write program to find pair of elements having sum equal to some specific number

Note: Pair of element can exist at any position. For example, in this list if we add second and second last element, result is 50. Therefore 10, 40 is a pair for number 50

2. The list has fifteen elements. Write function to find middle element, the middle element should be larger than half of the elements and smaller than half of the elements. You are not allowed to sort the list. You can take only two more simple variables (No other list is allowed).

3. Write program to return count of longest increasing sub sequence. That is increasing sub sequence means sub-array of adjacent values where each adjacent pair is in increasing order means left element is smaller from right element. In this list longest increasing sub sequence is 2, 29, 36, 58

4. Write program to print pair of elements having sum equal to sum other pair of element. Like in this array 10, 40 has sum equal to 36, 14

5. Write a function to receive a source string. The function will populate a target string with required words only, after remove unwanted words from source string. These words are "is, are, am, and, ...". See example for better understanding:

Source String: This is something interesting. We are happy.

Target String: This something interesting We happy