Assignment- 04

Investigating different architectures of linked list [CO4]

| Deadline

Instructions:
For every task you need to *show tracing/simulation, codes and final output. If tracing/simulation is*
missing, half of the marks will be deducted. Try to maintain sequence. Write name, student id, assignment
number and date of submission clearly.

Each of the following 10 tasks should have 3 parts-

    i. **Pseudo code/ java code**
    ii. **Tracing**
    iii. **Final output**

Task 1:

Create a DoublyList of 5 elements using your nickname. Hint: If your name is John, then the
elements should be –
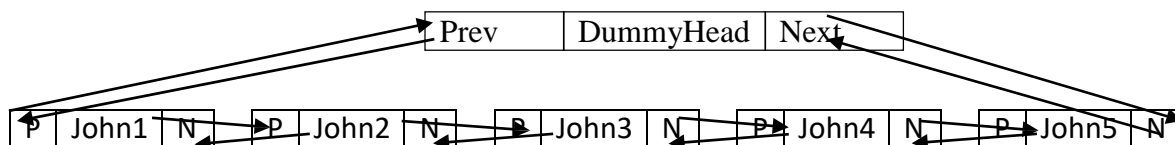
Task 2
Print the elements in the List.

Task 3
Count the number of elements in the List.

Task 4
Get an element from the List where an index is given where index will be (last 3 digit of your ID%5).

Task 5
Set an element in the List where an index is given where index will be (last 3 digit of your ID%4).

Task 6

Search an element from the List where an index is given where index will be (last 3 digit of your ID%3).

Task 7

Insert an element in the List in –

    I.   First position

    II.   Last position

    III.   A random position where Index will be (last 3 digit of your ID%5)

Task 8

Remove an element from the list from –

    I.   First position

    II.   Last position

    III.   A random position where Index will be (last 3 digit of your ID%4)

Task 9

Make a reversed copy of the List.

Task 10

Rotate the List –

    I.   To the right by 1 position.

    II.   To the left by 2 position.

i. To the right by 1 position.
ii. To the left by 1 position.

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