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Section	SE_3-2s

Task:

```
PS C:\Users\HP> cd 'c:\Users\HP\Desktop\DSA lab\lab 6\output'
PS C:\Users\HP\Desktop\DSA lab\lab 6\output> & .\'task 1.exe'
How many values do you want to insert in the list? 4
Enter value 1: 11
Enter value 2: 22
Enter value 3: 33
Enter value 4: 44
Linked list elements: 11 -> 22 -> 33 -> 44 -> NULL
The middle element (using two pointers) is: 33
The middle element (using count) is: 33
Reversed linked list: Linked list elements: 44 -> 33 -> 22 -> 11 -> NULL
PS C:\Users\HP\Desktop\DSA lab\lab 6\output>
```

Task 1:

```
PS C:\Users\HP> cd 'c:\Users\HP\Desktop\DSA lab\lab 6\output'
PS C:\Users\HP\Desktop\DSA lab\lab 6\output> & .\'shujaat task1.exe'
Enter value for node 1: 11
Enter value for node 2: 22
Enter value for node 3: 33
Enter value for node 4: 4
Enter value for node 5: 55
55 4 33 22 11
Enter value to insert:
```

Task 2:

```
PS C:\Users\HP> cd 'c:\Users\HP\Desktop\DSA lab\lab 6\output'
PS C:\Users\HP\Desktop\DSA lab\lab 6\output> & .\'shujaat task2.exe'
Enter value for node 1: 11
Enter value for node 2: 22
Enter value for node 3: 33
Enter value for node 4: 44
Enter value for node 5: 55
Original List: 55 44 33 22 11
Reversed List: 11 22 33 44 55
PS C:\Users\HP\Desktop\DSA lab\lab 6\output>
```

Task 3:

```
PS C:\Users\HP> cd 'c:\Users\HP\Desktop\DSA lab\lab 6\output'
PS C:\Users\HP\Desktop\DSA lab\lab 6\output> & .\'shujaat task3.exe'
How many values do you want to insert? 3
Enter value for Linked List 1: 11
Enter value for Linked List 2: 22
Enter value for Linked List 3: 33
Enter value for Array 1: 111
Enter value for Array 2: 222
Enter value for Array 3: 333
Linked List: 11 -> 22 -> 33 -> NULL
Array: 111 222 333
Linked List Insertion Time: 8.95 seconds
Array Insertion Time: 8.214 seconds
Enter value to delete from Linked List: 22
Enter value to delete from Array: 222
Linked List: 11 -> 33 -> NULL
Array: 111 333
Linked List Deletion Time: 0 seconds
Array Deletion Time: 0 seconds
PS C:\Users\HP\Desktop\DSA lab\lab 6\output>
```

Task 4:

```
PS C:\Users\HP> cd 'c:\Users\HP\Desktop\DSA lab\lab 6\output'
PS C:\Users\HP\Desktop\DSA lab\lab 6\output> & .\'task 4.exe'
How many values do you want to insert in the list? 4
Enter value 1: 11
Enter value 2: 22
Enter value 3: 33
Enter value 4: 44
Linked list elements: 11 -> 22 -> 33 -> 44 -> NULL
The middle element (using two pointers) is: 33
PS C:\Users\HP\Desktop\DSA lab\lab 6\output>
```

Task 3: