

TUGAS MATA KULIAH STRUKTUR DATA PERTEMUAN KE-4

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Kodingan :

```
1  #include <iostream>
2  using namespace std;
3
4  // Nama : Afridho Ikhsan
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7
8
9  struct Node
10 {
11     int data;
12     Node *next;
13 };
14
15 Node *head = NULL;
16
17 void inputData(int data)
18 {
19     Node *new_node = new Node;
20     new_node->data = data;
21     new_node->next = NULL;
22
23     if (head == NULL)
24     {
25         head = new_node;
26         return;
27     }
28
29     Node *node = head;
30     while (node->next != NULL)
31     {
32         node = node->next;
33     }
34     node->next = new_node;
35 }
```

```

37 void reverseList()
38 {
39     Node *prev = NULL, *current = head, *next = NULL;
40
41     while (current != NULL)
42     {
43         next = current->next;
44         current->next = prev;
45         prev = current;
46         current = next;
47     }
48     head = prev;
49 }
50
51 void outputLinkedList()
52 {
53     Node *node = head;
54     while (node != NULL)
55     {
56         cout << node->data << " ";
57         node = node->next;
58     }
59     cout << endl;
60 }
61
62 int main()
63 {
64     int n, data;
65     Node *head = NULL;
66
67     cout << "Masukkan 5 angka: ";
68     for (int i = 0; i < 5; i++)
69     {
70         cin >> data;
71         inputData(data);
72     }
73
74     cout << "\nLinked List Asli: ";
75     outputLinkedList();
76
77     reverseList();
78
79     cout << "Link List Setelah Direverse: ";
80     outputLinkedList();
81
82     return 0;
83 }

```

Output :

```

Masukkan 5 angka: 9
8
7
6
5

Original Linked List: 9 8 7 6 5
Reversed Linked List: 5 6 7 8 9

```