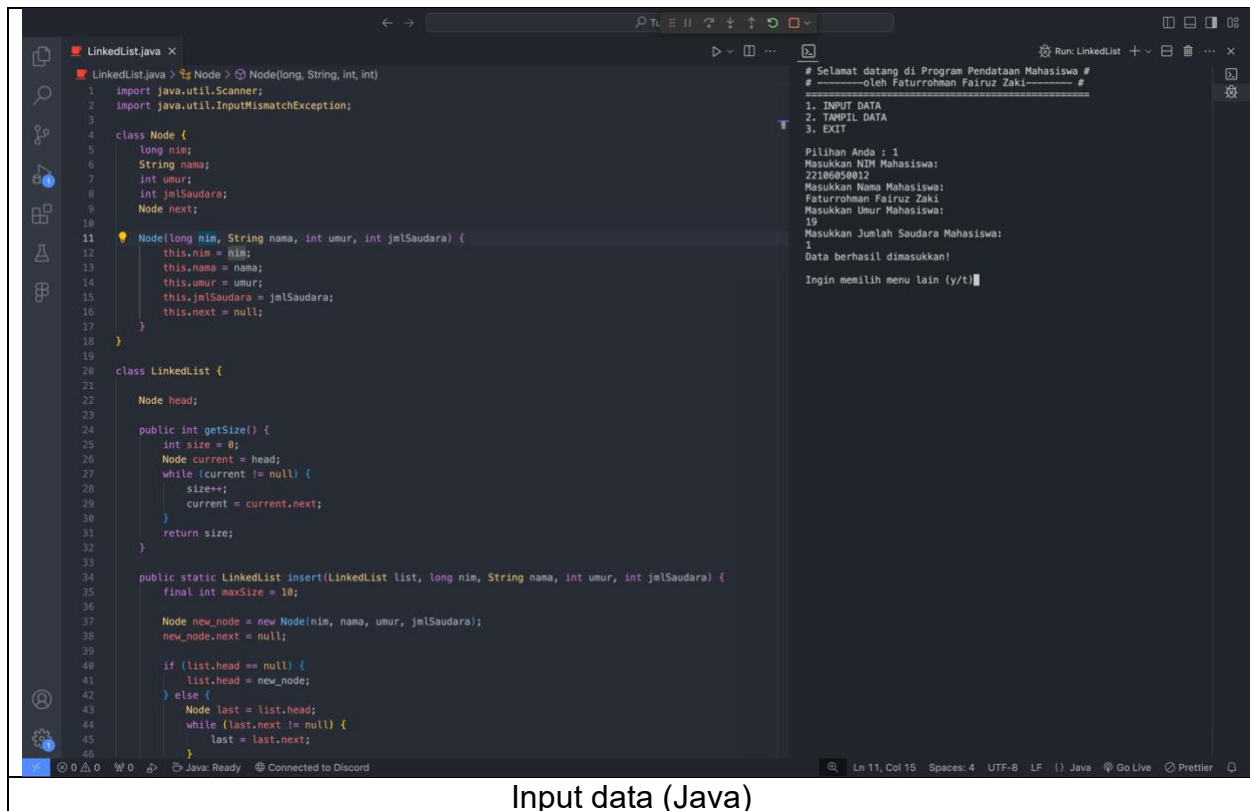


Output Program Pendataan Mahasiswa (Linked List) Perancangan Struktur Data

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NIM : 22106050012
Kelas : Informatika C



The screenshot displays an IDE with two panels. The left panel shows the source code for `LinkedList.java`, which includes a `Node` class and a `LinkedList` class. The `Node` class has attributes `nim`, `nama`, `umur`, `jmlSaudara`, and `next`. The `LinkedList` class includes methods for `getSize()` and `insert()`. The right panel shows the program's output, which includes a welcome message, a menu with options 1 (INPUT DATA), 2 (TAMPIL DATA), and 3 (EXIT), and a series of prompts for user input. The user has entered '1' for the menu, '22106050012' for NIM, 'Faturrohman Fairuz Zaki' for name, '19' for age, and '1' for the number of siblings. The program confirms the data entry and prompts for further menu selection.

```
LinkedList.java > Node > Node(long, String, int, int)
1 import java.util.Scanner;
2 import java.util.InputMismatchException;
3
4 class Node {
5     long nim;
6     String nama;
7     int umur;
8     int jmlSaudara;
9     Node next;
10
11     Node(long nim, String nama, int umur, int jmlSaudara) {
12         this.nim = nim;
13         this.nama = nama;
14         this.umur = umur;
15         this.jmlSaudara = jmlSaudara;
16         this.next = null;
17     }
18 }
19
20 class LinkedList {
21     Node head;
22
23     public int getSize() {
24         int size = 0;
25         Node current = head;
26         while (current != null) {
27             size++;
28             current = current.next;
29         }
30         return size;
31     }
32
33     public static LinkedList insert(LinkedList list, long nim, String nama, int umur, int jmlSaudara) {
34         final int maxSize = 10;
35
36         Node new_node = new Node(nim, nama, umur, jmlSaudara);
37         new_node.next = null;
38
39         if (list.head == null) {
40             list.head = new_node;
41         } else {
42             Node last = list.head;
43             while (last.next != null) {
44                 last = last.next;
45             }
46         }
47     }
48 }
```

```
# Selamat datang di Program Pendataan Mahasiswa #
# -----oleh Faturrohman Fairuz Zaki----- #
1. INPUT DATA
2. TAMPIL DATA
3. EXIT

Pilihan Anda : 1
Masukkan NIM Mahasiswa:
22106050012
Masukkan Nama Mahasiswa:
Faturrohman Fairuz Zaki
Masukkan Umur Mahasiswa:
19
Masukkan Jumlah Saudara Mahasiswa:
1
Data berhasil dimasukkan!
Ingin memilih menu lain (y/t)?
```

Input data (Java)

```
LinkedList.java x
LinkedList.java > Node > Node(long, String, int, int)
1 import java.util.Scanner;
2 import java.util.InputMismatchException;
3
4 class Node {
5     long nim;
6     String nama;
7     int umur;
8     int jmlSaudara;
9     Node next;
10
11     Node(long nim, String nama, int umur, int jmlSaudara) {
12         this.nim = nim;
13         this.nama = nama;
14         this.umur = umur;
15         this.jmlSaudara = jmlSaudara;
16         this.next = null;
17     }
18 }
19
20 class LinkedList {
21     Node head;
22
23     public int getSize() {
24         int size = 0;
25         Node current = head;
26         while (current != null) {
27             size++;
28             current = current.next;
29         }
30         return size;
31     }
32
33     public static LinkedList insert(LinkedList list, long nim, String nama, int umur, int jmlSaudara) {
34         final int maxSize = 10;
35
36         Node new_node = new Node(nim, nama, umur, jmlSaudara);
37         new_node.next = null;
38
39         if (list.head == null) {
40             list.head = new_node;
41         } else {
42             Node last = list.head;
43             while (last.next != null) {
44                 last = last.next;
45             }
46         }
47     }
48 }
49
50 Run: LinkedList
# Selamat datang di Program Pendataan Mahasiswa #
# -----oleh Faturrohman Fairuz Zaki----- #
=====
1. INPUT DATA
2. TAMPIL DATA
3. EXIT
=====
Pilihan Anda : 2
Data Mahasiswa:
=====
NIM      : 22106050012
Nama     : Faturrohman Fairuz Zaki
Umur     : 19
Jumlah Saudara : 1
=====
NIM      : 22106050100
Nama     : Budi Cahyono
Umur     : 20
Jumlah Saudara : 4
=====
Ingin memilih menu lain (y/t) |
```

Tampilkan data (Java)

```
linkedList.py x
linkedList.py > LinkedList > __init__
1 import os
2
3 class Student:
4     def __init__(self, nim, nama, umur, jmlSaudara):
5         self.nim = nim
6         self.nama = nama
7         self.umur = umur
8         self.jmlSaudara = jmlSaudara
9         self.next = None
10
11
12 class LinkedList:
13     def __init__(self):
14         self.head = None
15
16     def insertLinkedList(self, nim, nama, umur, jmlSaudara):
17         new_node = Student(nim, nama, umur, jmlSaudara)
18         if self.head is None:
19             self.head = new_node
20         else:
21             new_node.next = self.head
22             self.head = new_node
23
24     def sizeOfLL(self):
25         size = 0
26         current_node = self.head
27         while current_node:
28             size += 1
29             current_node = current_node.next
30         return size
31
32
33 def main():
34     print("# Selamat datang di Program Pendataan Mahasiswa #")
35     print("=====oleh: Faturrohman Fairuz Zaki #=====")
36     print("=====")
37     print("1. INPUT DATA")
38     print("2. TAMPIL DATA")
39     print("3. EXIT")
40     choice = input("Pilihan Anda : ")
41     return choice
42
43 student = LinkedList()
44
45 while True:
46     choice = main()
47     if choice == "1":
48         nim = input("Masukkan NIM : ")
49         nama = input("Masukkan Nama : ")
50         umur = input("Masukkan Umur : ")
51         jmlSaudara = input("Masukkan Jumlah Saudara : ")
52         student.insertLinkedList(nim, nama, umur, jmlSaudara)
53     elif choice == "2":
54         print("=====")
55         print("1. INPUT DATA")
56         print("2. TAMPIL DATA")
57         print("3. EXIT")
58         choice = input("Pilihan Anda : ")
59         if choice == "2":
60             print("=====")
61             print("NIM      : 22106050012")
62             print("Nama     : Faturrohman Fairuz Zaki")
63             print("Umur     : 19")
64             print("Jumlah Saudara : 1")
65             print("=====")
66         elif choice == "3":
67             break
68     elif choice == "3":
69         break
70     else:
71         print("Pilihan tidak valid")
72
73 if __name__ == "__main__":
74     main()
```

Input data (Python)

```
LinkedList.py x
LinkedList.py > LinkedList > __init__
1 import os
2
3 class Student:
4     def __init__(self, nim, nama, umur, jmlSaudara):
5         self.nim = nim
6         self.nama = nama
7         self.umur = umur
8         self.jmlSaudara = jmlSaudara
9         self.next = None
10
11
12 class LinkedList:
13     def __init__(self):
14         self.head = None
15
16     def insertLinkedList(self, nim, nama, umur, jmlSaudara):
17         new_node = Student(nim, nama, umur, jmlSaudara)
18         if self.head is None:
19             self.head = new_node
20         else:
21             new_node.next = self.head
22             self.head = new_node
23
24     def sizeOfLL(self):
25         size = 0
26         current_node = self.head
27         while current_node:
28             size += 1
29             current_node = current_node.next
30         return size
31
32
33 def main():
34     print("# Selamat datang di Program Pendataan Mahasiswa #")
35     print("===== oleh: Faturrohan Fairuz Zaki #=====")
36     print("=====")
37     print("1. INPUT DATA")
38     print("2. TAMPIL DATA")
39     print("3. EXIT")
40     choice = input("Pilihan Anda : ")
41     return choice
42
43 student = LinkedList()
44
45 while True:
46     choice = main()
47     if choice == "1":
48         nim = input("NIM : ")
49         nama = input("Nama : ")
50         umur = input("Umur : ")
51         jmlSaudara = input("Jumlah Saudara : ")
52         student.insertLinkedList(nim, nama, umur, jmlSaudara)
53     elif choice == "2":
54         student.sizeOfLL()
55     elif choice == "3":
56         break
57     else:
58         print("Pilihan tidak valid")
59
60 if __name__ == '__main__':
61     main()
```

Python + Python 3.12.2 64-bit Go Live Prettier

Ln 14, Col 25 Spaces: 4 UTF-8 LF Python 3.12.2 64-bit Go Live Prettier

Tampilkan data (Python)