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**LAPORAN PRAKTIKUM**

* **Identitas Praktikum**

Nama MK : Struktur Data

Kode MK : CCK2AAB4

Bobot SKS : 4 SKS

Tempat : L-Program, Gedung DC, lantai 3

Hari, tanggal : Selasa, 29 Oktober 2024

Jam : 12:30-15:30 WIB

Topik praktikum : Modul-6 DOUBLE LINKED LIST (BAGIAN PERTAMA)

* **Identitas Mahasiswa**

Nama lengkap : Afad Fath Musyarof Halim

NIM : 2211104030

Program Studi : S-1 Software Engineering

* **Hasil Praktikum** 
  1. Double Linked List
     1. Insert

1. Insert First  
   A screen shot of a computer code

   Description automatically generated
2. Insert Last  
   A screen shot of a computer code

   Description automatically generated
3. Insert After  
   A screen shot of a computer code

   Description automatically generated
4. Insert Before  
   A screen shot of a computer code

   Description automatically generated
   * 1. Delete
5. Delete First  
   A screen shot of a computer code

   Description automatically generated
6. Delete Last  
   A computer code with colorful text

   Description automatically generated
7. Delete After  
   A computer screen with text

   Description automatically generated
8. Delete Before  
   A screen shot of a computer code

   Description automatically generated
9. Update   
   A screen shot of a computer code

   Description automatically generated
10. Search  
    A computer code with colorful text

    Description automatically generated
11. View  
    A computer code on a black background

    Description automatically generated
    1. Latihan
       1. Buat Double Linked List

* Code
  + Doublelist.h  
    A screenshot of a computer program

    Description automatically generated
  + Doublelist.cpp  
    A screen shot of a computer program

    Description automatically generated
  + Main.cpp  
    A screen shot of a computer program

    Description automatically generated
* Output  
  A screenshot of a computer program

  Description automatically generated
* Penjelasan
  + ‘CreateList()’ untuk membuat list dengan pointer kosong
  + ‘alokasi()’ untuk mengalokasikan memori untuk elemen baru
  + ‘dealokasi()’ untuk menghapus alokasi memori
  + ‘printInfo()’ untuk menampilkan isi/info dari list
  + ‘insertLast()’ untuk menambahkan elemen ke list
    1. Carilah elemen dengan nomor polisi D001 dengan membuat fungsi baru
* Code
  + Tambahan Doublelist.h  
    A purple and yellow text

    Description automatically generated
  + Tambahan Doublelist.cpp  
    A screen shot of a computer program

    Description automatically generated
  + Tambahan Main.cpp  
    A screen shot of a computer code

    Description automatically generated
* Output  
  A screenshot of a computer

  Description automatically generated
* Penjelasan
  + Memulai dari node pertama
  + Membandingkan nopol dari setiap info dengan nopol yang ingin dicari
  + Jika ada maka node tersebut di kembalikan dan node di tampilkan
  + Jika tidak maka menampilkan data kosong
    1. Hapus elemen dengan nomor polisi D003 dengan prosedur delete
* Code
  + Tambahan Doublelist.h  
    A close up of a sign

    Description automatically generated
  + Tambahan Doublelist.cpp  
    A screen shot of a computer code

    Description automatically generated
  + Tambahan Main.cpp  
    A screen shot of a computer program

    Description automatically generated
* Output  
  A screenshot of a computer

  Description automatically generated
* Penjelasan
  + Cek apakah list kosong, jika iya lanjutkan, jika tidak berhenti
  + Menghapus elemen setelah prec
  + Mengatur pointer dari prev elemen
  + Mengatur pointer p