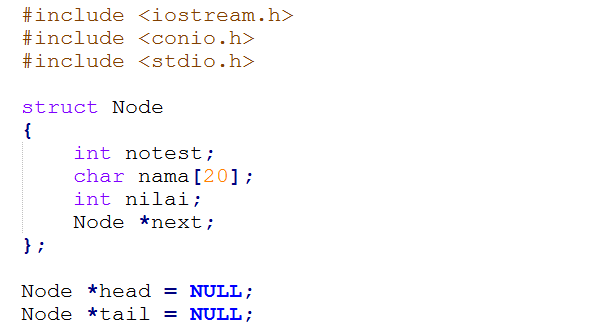
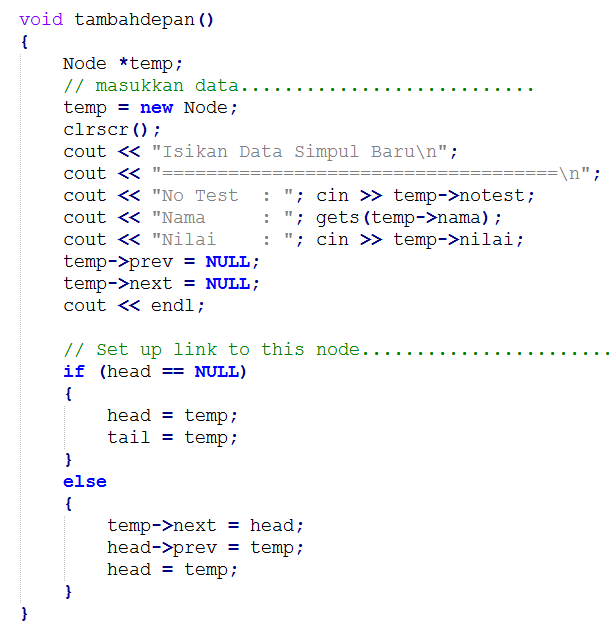
**Topik 10 DLLNC / Link List (**Pertemuan 12**)**

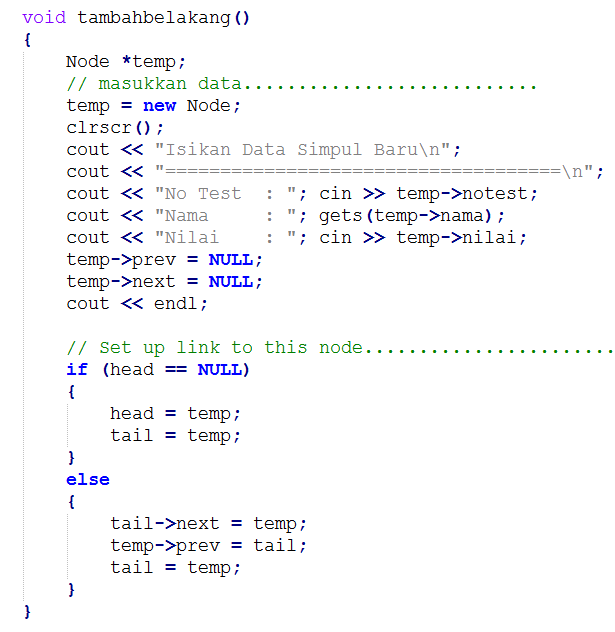
**Jumat**, 25 Desember 2020

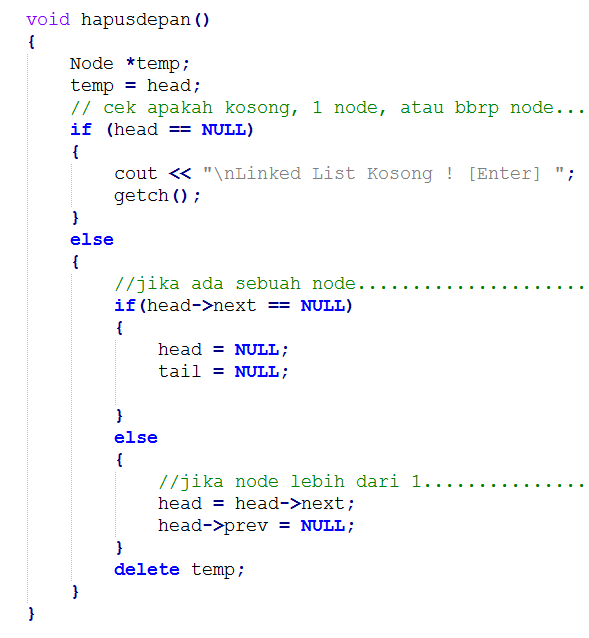
**Latihan 1 :**

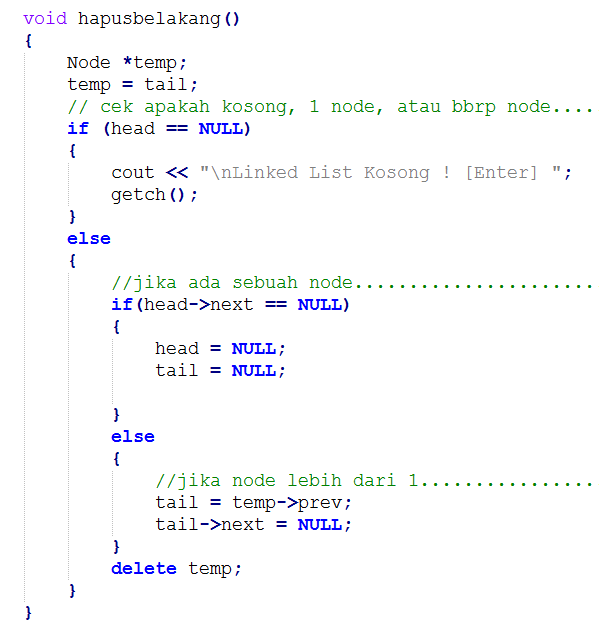
**Kode program :**

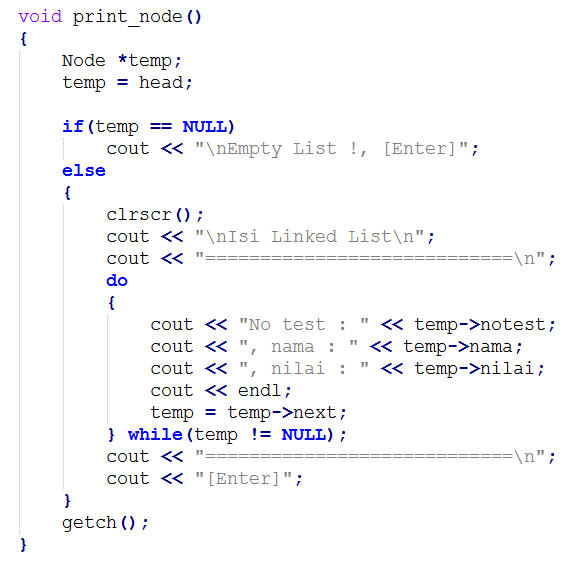


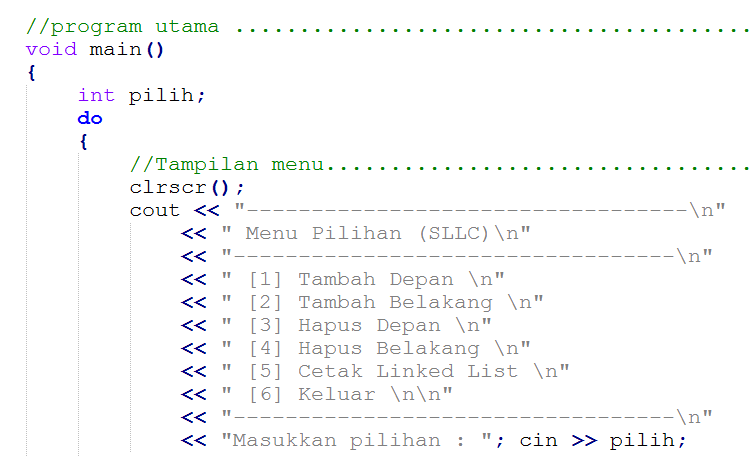
****

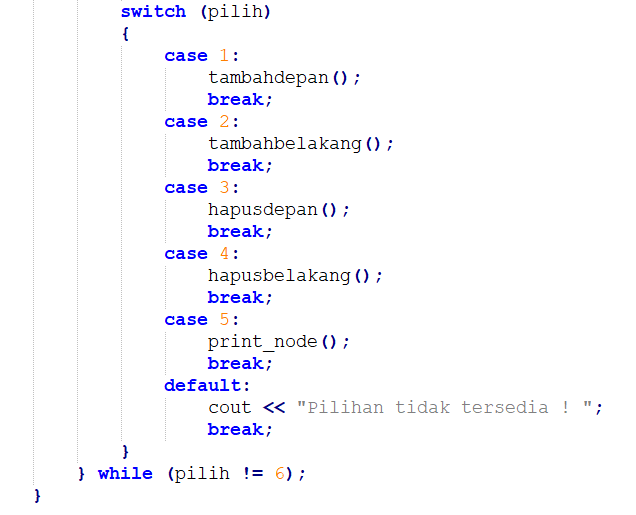
****

****

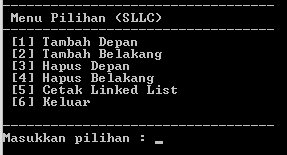
****

****

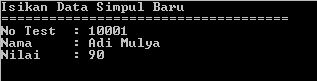
****

****

**Output program :**

****

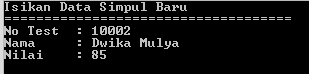
**Pilihan [1]**

****

**Pilihan [5]**

****

**Pilihan [2]**

****

**Pilihan [5]**

****

**Pilihan [4]**

**-**

**Pilihan [5]**

****

DIKUMPULKAN :

Nama File : **A12P99AlproXXXXXNama** (99 nomor tugas, XXXXX : 5 digit NIM terakhir)

Format file : PDF

Dikirim ke : [suharnawi@dsn.dinus.ac.id](mailto:suharnawi@dsn.dinus.ac.id)

Dikumpulkan paling lambat 20 Desember 2020

Source code :

#include <iostream.h>

#include <conio.h>

#include <stdio.h>

struct Node

{

int notest;

char nama[20];

int nilai;

Node \*prev;

Node \*next;

};

Node \*head = NULL;

Node \*tail = NULL;

void tambahdepan()

{

Node \*temp;

// masukkan data...........................

temp = new Node;

clrscr();

cout << "Isikan Data Simpul Baru\n";

cout << "====================================\n";

cout << "No Test : "; cin >> temp->notest;

cout << "Nama : "; gets(temp->nama);

cout << "Nilai : "; cin >> temp->nilai;

temp->prev = NULL;

temp->next = NULL;

cout << endl;

// Set up link to this node........................

if (head == NULL)

{

head = temp;

tail = temp;

}

else

{

temp->next = head;

head->prev = temp;

head = temp;

}

}

void tambahbelakang()

{

Node \*temp;

// masukkan data...........................

temp = new Node;

clrscr();

cout << "Isikan Data Simpul Baru\n";

cout << "====================================\n";

cout << "No Test : "; cin >> temp->notest;

cout << "Nama : "; gets(temp->nama);

cout << "Nilai : "; cin >> temp->nilai;

temp->prev = NULL;

temp->next = NULL;

cout << endl;

// Set up link to this node........................

if (head == NULL)

{

head = temp;

tail = temp;

}

else

{

tail->next = temp;

temp->prev = tail;

tail = temp;

}

}

void hapusdepan()

{

Node \*temp;

temp = head;

// cek apakah kosong, 1 node, atau bbrp node.......

if (head == NULL)

{

cout << "\nLinked List Kosong ! [Enter] ";

getch();

}

else

{

//jika ada sebuah node.........................

if(head->next == NULL)

{

head = NULL;

tail = NULL;

}

else

{

//jika node lebih dari 1...................

head = head->next;

head->prev = NULL;

}

delete temp;

}

}

void hapusbelakang()

{

Node \*temp;

temp = tail;

// cek apakah kosong, 1 node, atau bbrp node.......

if (head == NULL)

{

cout << "\nLinked List Kosong ! [Enter] ";

getch();

}

else

{

//jika ada sebuah node.........................

if(head->next == NULL)

{

head = NULL;

tail = NULL;

}

else

{

//jika node lebih dari 1...................

tail = temp->prev;

tail->next = NULL;

}

delete temp;

}

}

void print\_node()

{

Node \*temp;

temp = head;

if(temp == NULL)

cout << "\nEmpty List !, [Enter]";

else

{

clrscr();

cout << "\nIsi Linked List\n";

cout << "============================\n";

do

{

cout << "No test : " << temp->notest;

cout << ", nama : " << temp->nama;

cout << ", nilai : " << temp->nilai;

cout << endl;

temp = temp->next;

} while(temp != NULL);

cout << "============================\n";

cout << "[Enter]";

}

getch();

}

//program utama ...........................................

void main()

{

int pilih;

do

{

//Tampilan menu....................................

clrscr();

cout << "----------------------------------\n"

<< " Menu Pilihan (SLLNC)\n"

<< "----------------------------------\n"

<< " [1] Tambah Depan \n"

<< " [2] Tambah Belakang \n"

<< " [3] Hapus Depan \n"

<< " [4] Hapus Belakang \n"

<< " [5] Cetak Linked List \n"

<< " [6] Keluar \n\n"

<< "----------------------------------\n"

<< "Masukkan pilihan : "; cin >> pilih;

switch (pilih)

{

case 1:

tambahdepan();

break;

case 2:

tambahbelakang();

break;

case 3:

hapusdepan();

break;

case 4:

hapusbelakang();

break;

case 5:

print\_node();

break;

default:

cout << "Pilihan tidak tersedia ! ";

break;

}

} while (pilih != 6);

}