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#include<stdio.h>
#include<stdlib.h>

typedef struct simpul Node;
struct simpul{
    int data;
    Node *next;
};

Node *head=NULL, *baru;

void allocate_node(int x)
{
    baru = (Node *) malloc (sizeof(Node));
    if(baru==NULL){
        printf("Alokasi gagal\n");
        exit(1);
    }
    else{
        baru->data=x;
        baru->next=NULL;
    }
}

void cetak()
{
    Node *p = head;
    while(p!=NULL){
        printf("%d ", p->data);
        p = p->next;
    }
    printf("\n");
}

void sisip_awal()
{
    baru->next = head;
    head = baru;
}

void sisip_akhir()
{
    Node *tail = head;
    while(tail->next!=NULL)
        tail = tail->next;
    tail->next = baru;
}
```

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void sisip_sebelum(int x)
{
    Node *before = head;
    while(before->next->data!=x)
        before = before->next;
    baru->next = before->next;
    before->next = baru;
}

void sisip_setelah(int x)
{
    Node *after = head;
    while(after->data!=x)
        after = after->next;
    baru->next = after->next;
    after->next = baru;
}

int main()
{
    int dt, pilih, x;
    char lagi='y';
    allocate_node(10);
    head = baru;
    cetak();
    while(lagi=='y'){
        printf("1.Sisip awal\n");
        printf("2.Sisip akhir\n");
        printf("3.Sisip sebelum simpul tertentu\n");
        printf("4.Sisip setelah simpul tertentu\n");
        printf("Pilihan: "); fflush(stdin); scanf("%d",&pilih);
        switch(pilih){
            case 1: printf("Masukkan data: "); scanf("%d",&dt);
                    allocate_node(dt);
                    sisip_awal();
                    break;
            case 2: printf("Masukkan data: "); scanf("%d",&dt);
                    allocate_node(dt);
                    sisip_akhir();
                    break;
            case 3: printf("Masukkan data: "); scanf("%d",&dt);
                    allocate_node(dt);
                    printf("Sisip sebelum simpul: "); scanf("%d",&x);
                    sisip_sebelum(x);
                    break;
            case 4: printf("Masukkan data: "); scanf("%d",&dt);
                    allocate_node(dt);
                    printf("Sisip setelah simpul: "); scanf("%d",&x);
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Untitled

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        sisip_setelah(x);
        break;
    }
    cetak();
    printf("Lagi?(y/n) "); fflush(stdin); scanf("%c",&lagi);
}
}
```