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#include <stdio.h>

#include <stdlib.h>

//membuat struct
struct train{
    int gerbong;
    int penumpang[10];
    struct train *next;
    struct train *prev;
}*head=NULL, *tail=NULL, *curr=NULL;

//inisialisasi variable yang digunakan
int i;
int penumpang[10];

//fungsi utama
int main(){
    srand(time(0));
    int input;
    int tampung =rand()%10;
    for(i=0;i<10;i++){
        push(i);
    }
    display(tampung);
    while(1){
        printf(">> ");
        scanf("%d",&input);
        puts("");
        if(input==1){
            tampung--;
            display(tampung);

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    }

    else if(input==2){

        tampung++;

        display(tampung);

        puts("");

    }

    else if(input==3){

        exit:

        break;

    }

}

return 0;

}

```

//fungsi untuk memilih menu

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void menu(){

    printf("\nChoose your need :\n");

    printf("1. Move to Left\n");

    printf("2. Move to Right\n");

    printf("3. Exit\n");

}

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//fungsi untuk bergeser

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void push(int gerbong){

    curr=(struct train*)malloc(sizeof(struct train));

    curr->penumpang[0]=rand()%2;

    curr->penumpang[1]=rand()%2;

    curr->penumpang[2]=rand()%2;

    curr->penumpang[3]=rand()%2;

    curr->penumpang[4]=rand()%2;

    curr->penumpang[5]=rand()%2;
}

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curr->penumpang[6]=rand()%2;
curr->penumpang[7]=rand()%2;
curr->penumpang[8]=rand()%2;
curr->penumpang[9]=rand()%2;
curr->gerbong=gerbong;
curr->next=NULL;
curr->prev=NULL;
if(head==NULL){
    head=tail=curr;
}
else{
    tail->next=curr;
    curr->prev=tail;
    tail=curr;
}
tail->next=head;
head->prev=tail;
}

```

//fungsi untuk menampilkan gerbong dan penumpang

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void display(int indeks){
    curr=head;
    int var=0;
    while(var<10){
        if(indeks==var){
            printf(" [You're here] <=> ");
        }
        else{
            printf("[Gerbong ke %d] <==> ",var);
        }
        var++;
    }
}

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curr=curr->next;
}
printf(" Head\n");
printf("\nPenumpang Dengan Tiket: ");
    for(i=0;i<10;i++){
        curr->gerbong=indeks;
        if(curr->penumpang[i]==1){
            int rumus=10*curr->gerbong + i;
            if(rumus<0 || rumus>99){
                printf(" Tidak Ada Gerbong Yang Bisa Di Cek\n");
                break;
            }
            else{
                printf("%d ",rumus);
            }
        }
    }

}

printf("\n");
printf("Penumpang Tanpa Tiket:");
for(i=0;i<10;i++){
    curr->gerbong=indeks;
    if(curr->penumpang[i]==0){
        int rumus=10*curr->gerbong + i;
        if(rumus<0 || rumus>99){
            printf(" Tidak Ada Gerbong Yang Bisa Di Cek\n");
            break;
        }
        else{
            printf(" %d ",rumus);
        }
    }
}

```

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}
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}
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printf("\n");
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```
menu();
```

```
}
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