1. Source Code Tugas Tambahan Dosen

#include <iostream>

#include <stdlib.h>

using namespace std;

int l,r,q[100],x,n,pil,i,j;

char ulang;

void awal(){

l = 0;

r = -1;

}

void insert\_kiri(int x){

l--;

q[l] = x;

}

void delete\_kiri(){

x = q[l];

l++;

}

void insert\_kanan(int x){

r++;

q[r] = x;

}

void delete\_kanan(){

x = q[r];

r--;

}

bool isEmpty(){

return l==r+1 ? true : false;

}

bool penuh\_kiri(){

return l==0 ? true : false;

}

bool penuh\_kanan(){

return r==n-1 ? true : false;

}

void view()

{

for(i=l;i<=r;i++){

cout<<q[i]<<" ";

}

}

void menu(){

cout<<"Double Queue"<<endl;

cout<<"==============="<<endl;

cout<<"1. Insert kanan "<<endl;

cout<<"2. Insert kiri "<<endl;

cout<<"3. Hapus kanan "<<endl;

cout<<"4. Hapus kiri "<<endl;

cout<<"5. Lihat data "<<endl;

cout<<"masukkan pilihan anda ? ";

cin>>pil;

if(pil == 1){

if(!penuh\_kanan()){

cout<<"Masukkan data kanan ";

cin>>x;

insert\_kanan(x);

cout<<"data yang anda masukkan adalah "<<x<<endl;

} else {

cout<<"Data kanan penuh"<<endl;

}

} else if(pil == 2){

if(!penuh\_kiri()){

cout<<"Masukkan data kiri ";

cin>>x;

insert\_kiri(x);

cout<<"data yang anda masukkan adalah "<<x<<endl;

} else {

cout<<"data kanan harus di isi atau data penuh";

}

} else if(pil == 3){

if(!isEmpty()){

delete\_kanan();

} else {

cout<<"Data kosong";

}

} else if(pil == 4){

if(!isEmpty()){

delete\_kiri();

} else {

cout<<"Data kosong";

}

} else if(pil == 5){

cout<<"Data ";

view();

cout<<endl;

} else {

cout<<"Pilihan salah"<<endl;

}

}

int main(){

awal();

cout<<"masukkan batas data ";

cin>>n;

do{

menu();

cout<<endl;

cout<<"apakah anda ingin mengulang ";

cin>>ulang;

system("CLS");

} while(ulang=='y' || ulang == 'Y');

}

