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#include<iostream>           // add and delete end
#include<conio.h>
using namespace std;
struct dnode
{int x;
dnode *r;
dnode *L;
};
void insert_dnode_end(dnode **p)
{if(*p==NULL)
{*p=new dnode();
if(*p==NULL)
{cout<<"no space\n";
getch();
return;
}
cout<<"enter the value:\n";
cin>>(*p)->x;
(*p)->L=NULL;
(*p)->r=NULL;
}
else
{dnode *T=*p;
dnode *T2;
while(T->r!=NULL)
T=T->r;
T2=new(dnode);
if(T2==NULL)
{cout<<"no space:\n";
getch();
return;
}
cout<<"enter the value:\n";
cin>>T2->x;
T2->L=T;
T2->r=NULL;
T->r=T2;
}
}
void de_dnode_end(dnode **p)
{if(*p==NULL)
{cout<<"double node! is empty\n";
getch();
return;
}
dnode *T=*p;
(*p)=(*p)->r;
cout<<"the deleted value is:"<<T->x<<endl;
delete T;
}
void print_dnode_end(dnode **p)
{if((*p)->r==NULL)
{cout<<"double node is empty!\n";
getch();
return;}
dnode *T=*p;
while(T!=NULL)
{cout<<T->x<<endl;

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T=T->r;
}
}
void main()
{   int x;
    dnode *p=NULL;
    cout<<"\t\t\t\t('-' ) Welcome to double linked list ('-')\n";
do
{cout<<"press 1 to enter data:\n";
cout<<"press 2 to delete data:\n";
cout<<"press 3 to print datas:\n";
cout<<"Please choose a number:\n";
cin>>x;
switch(x)
{case 1:insert_dnode_end(&p);break;
case 2:de_dnode_end(&p);break;
case 3:print_dnode_end(&p);break;
default:cout<<"please enter your choice correctly!\n";
}
cout<<"to exit press 0:\n";
cin>>x;
}while(x!=0);
getch();
}

```