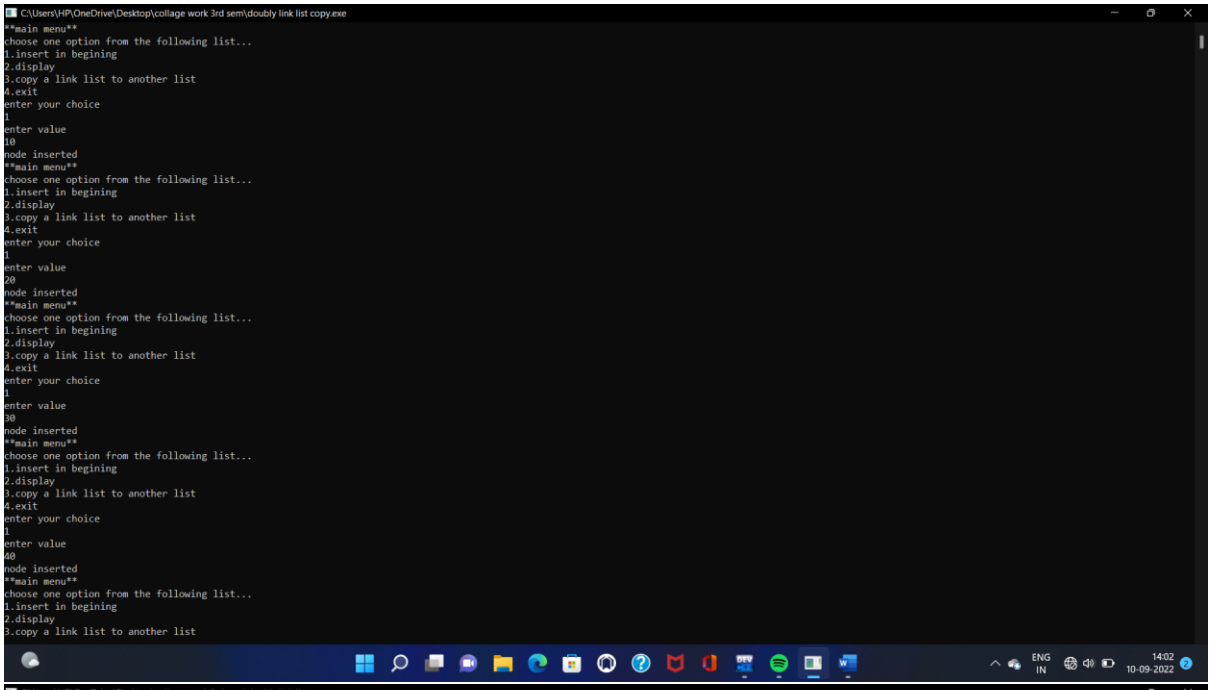
/*doubly link list copy*/

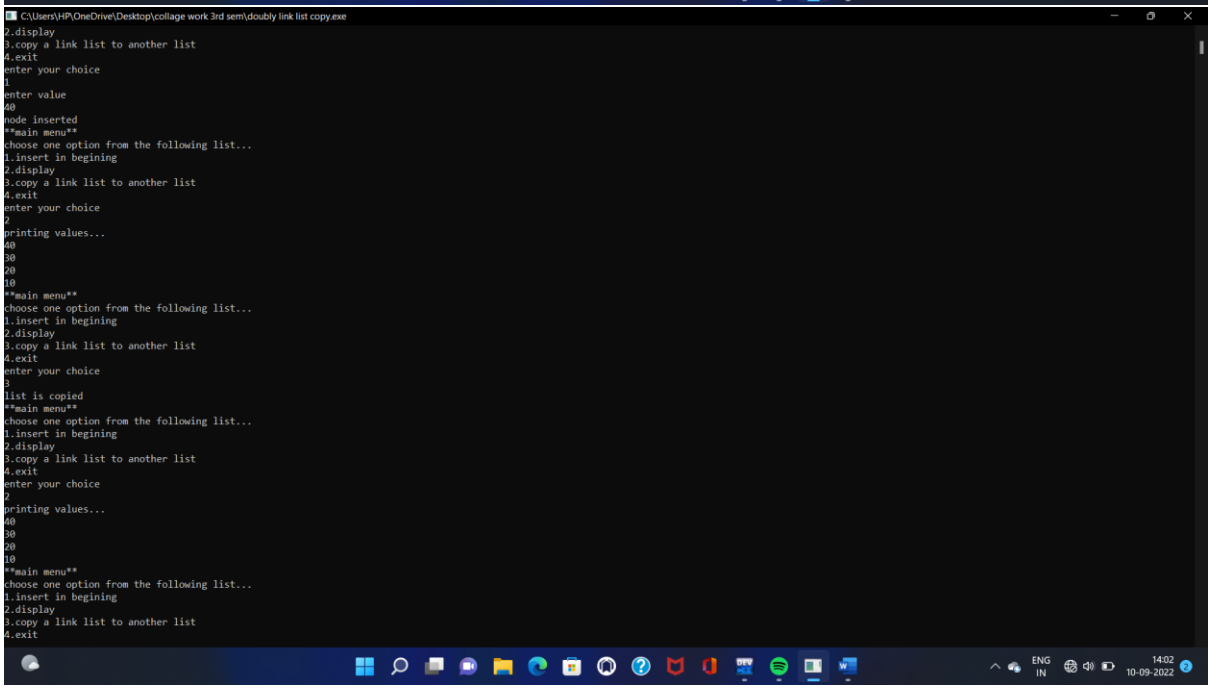
```
#include<stdio.h>
#include<stdlib.h>
struct node
{
	int data;
	struct node *rnext;
	struct node *lnext;
};
struct node*header;
void beginsert();
void display();
void copy();
int main()
{
	int choice=0;
	while(choice!=4)
	{
		printf("**main menu**\n");
		printf("choose one option from the following list...\n");
		printf("1.insert in begining\n2.display\n3.copy a link list to another list\n4.exit\n");
		printf("enter your choice\n");
		scanf("%d",&choice);
		switch(choice)
		{
			case 1:beginsert();
			break;
			case 2:display();
			break;
			case 3:copy();
			break;
```

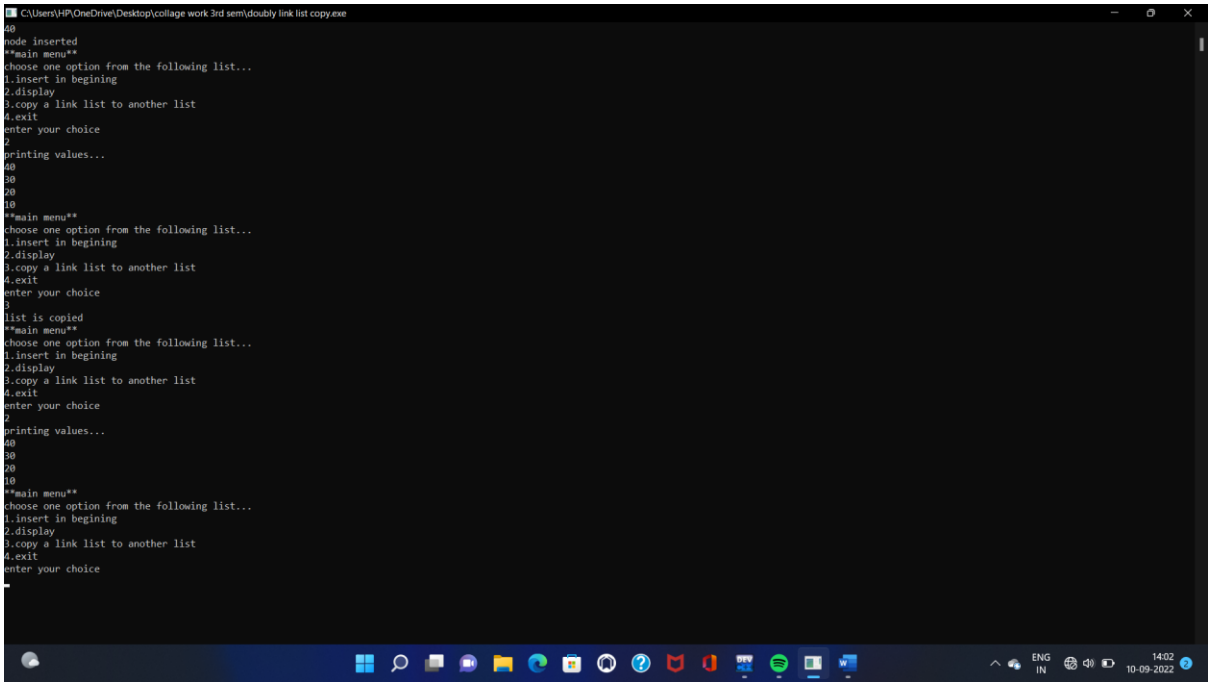
```
                        case 4:exit(0);
                        break;
                        default:
                                printf("invalid choice\n");
                }
        }
}
void beginsert()
{
        struct node*ptr;
        int item;
        ptr=(struct node*)malloc(sizeof(struct node*));
        if(ptr==NULL)
        {
                printf("OVERFLOW\n");
        }
        else
        {
                printf("enter value\n");
                scanf("%d",&item);
                ptr->data=item;
                ptr->rnext=header;
                header=ptr;
                printf("node inserted\n");
        }
}
void display() //traversal
{
        struct node*ptr;
        ptr=header;
        if(ptr==NULL)
```

```
	{
		printf("nothing to print\n");
	}
	else
	{
		printf("printing values...\n");
		while(ptr!=NULL)
		{
			printf("%d\n",ptr->data);
			ptr=ptr->rnext;
		}
	}
}
void copy()
{
	struct node*ptr,*ptr1;
	struct node*header1;
	//header1=new_node;
	ptr=(struct node*)malloc(sizeof(struct node*));
	header1=(struct node*)malloc(sizeof(struct node*));
	ptr=header->rnext;
	header1->data=NULL;
	ptr1=header1;
	while(ptr!=NULL)
	{
		header1->data=ptr->data;
		ptr1->rnext=header1;
		ptr1=header1;
		ptr=ptr->rnext;
	}
	printf("list is copied\n");
```

}


C:\Users\HP\OneDrive\Desktop\collage work 3rd sem\doubly link list copy.exe
main menu
choose one option from the following list...
1.insert in begining
2.display
3.copy a link list to another list
4.exit
enter your choice
1
enter value
10
node inserted
main menu
choose one option from the following list...
1.insert in begining
2.display
3.copy a link list to another list
4.exit
enter your choice
1
enter value
20
node inserted
main menu
choose one option from the following list...
1.insert in begining
2.display
3.copy a link list to another list
4.exit
enter your choice
1
enter value
30
node inserted
main menu
choose one option from the following list...
1.insert in begining
2.display
3.copy a link list to another list
4.exit
enter your choice
1
enter value
40
node inserted
main menu
choose one option from the following list...
1.insert in begining
2.display
3.copy a link list to another list
ENG
IN
14:02
10-09-2022


C:\Users\HP\OneDrive\Desktop\collage work 3rd sem\doubly link list copy.exe
2.display
3.copy a link list to another list
4.exit
enter your choice
1
enter value
40
node inserted
main menu
choose one option from the following list...
1.insert in begining
2.display
3.copy a link list to another list
4.exit
enter your choice
2
printing values...
40
30
20
10
main menu
choose one option from the following list...
1.insert in begining
2.display
3.copy a link list to another list
4.exit
enter your choice
3
list is copied
main menu
choose one option from the following list...
1.insert in begining
2.display
3.copy a link list to another list
4.exit
enter your choice
2
printing values...
40
30
20
10
main menu
choose one option from the following list...
1.insert in begining
2.display
3.copy a link list to another list
4.exit
ENG
IN
14:02
10-09-2022


C:\Users\HP\OneDrive\Desktop\collage work 3rd sem\doubly link list copy.exe
40
node inserted
main menu
choose one option from the following list...
1.insert in begining
2.display
3.copy a link list to another list
4.exit
enter your choice
2
printing values...
40
30
20
10
main menu
choose one option from the following list...
1.insert in begining
2.display
3.copy a link list to another list
4.exit
enter your choice
3
list is copied
main menu
choose one option from the following list...
1.insert in begining
2.display
3.copy a link list to another list
4.exit
enter your choice
2
printing values...
40
30
20
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main menu
choose one option from the following list...
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ENG
IN
14:02
10-09-2022