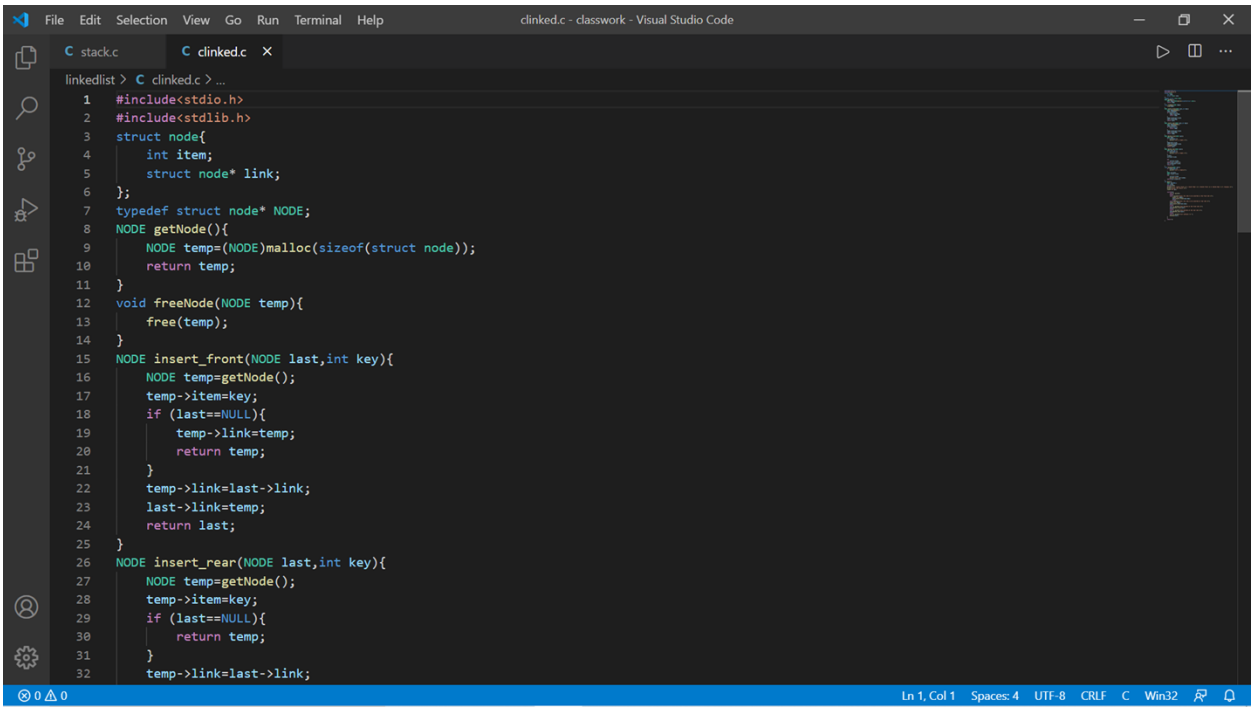
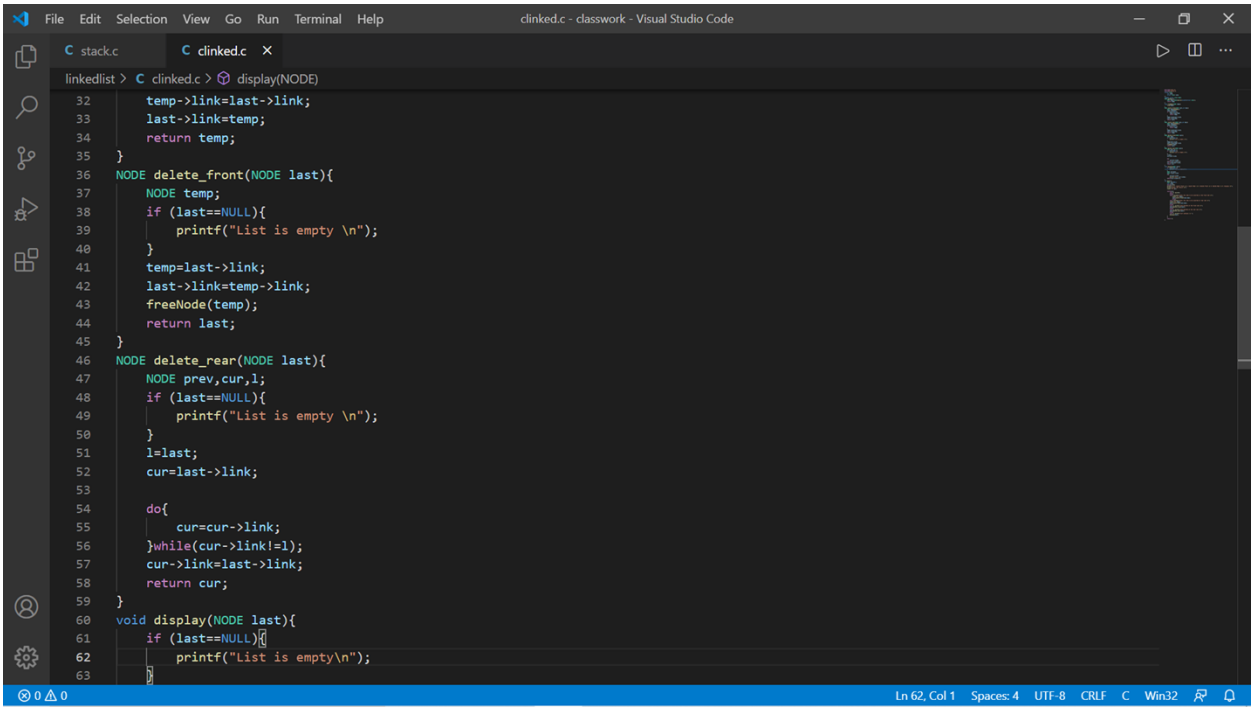
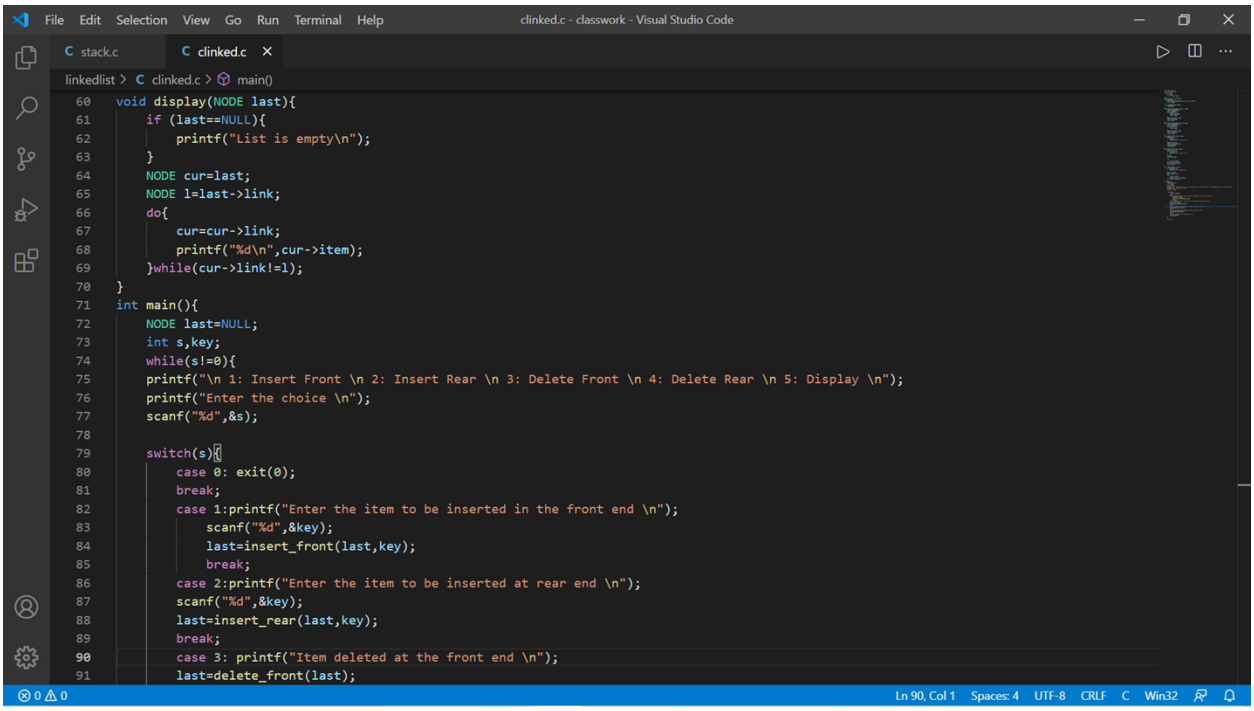
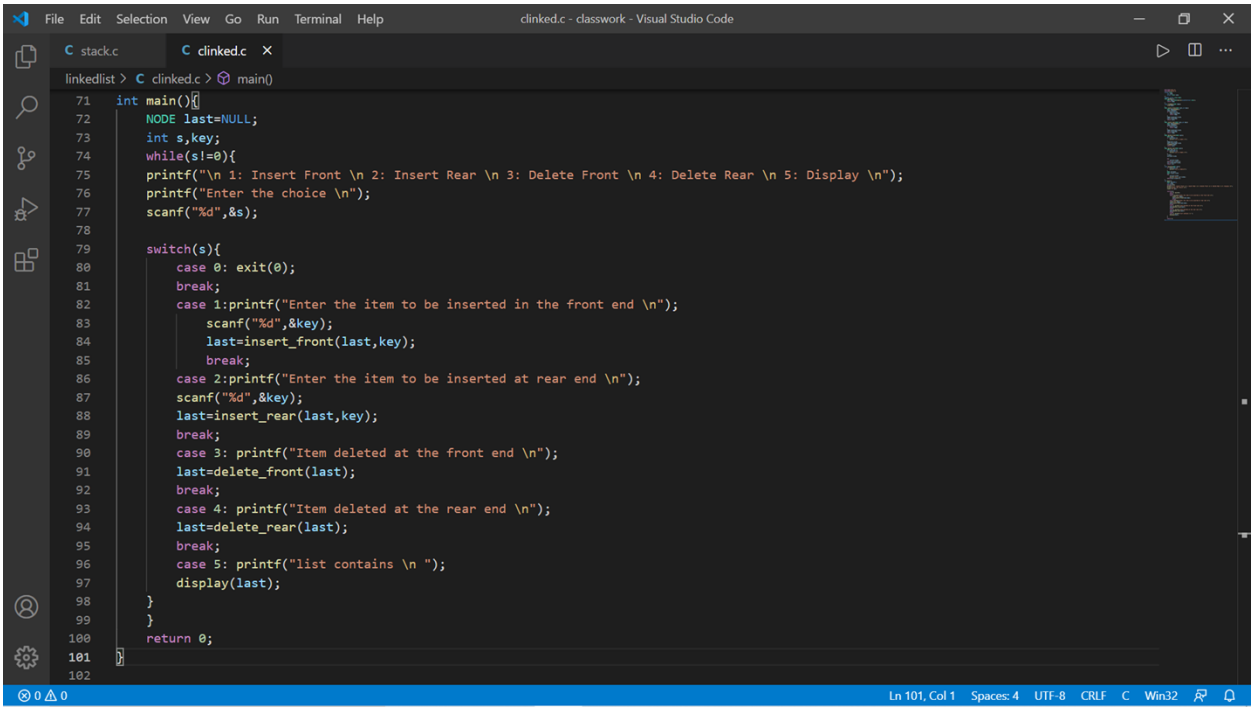

File Edit Selection View Go Run Terminal Help
clinked.c - classwork - Visual Studio Code
stack.c
clinked.c
linkedlist > clinked.c > ...
#include<stdio.h>
#include<stdlib.h>
struct node{
int item;
struct node* link;
};
typedef struct node* NODE;
NODE getNode(){
NODE temp=(NODE)malloc(sizeof(struct node));
return temp;
}
void freeNode(NODE temp){
free(temp);
}
NODE insert_front(NODE last,int key){
NODE temp=getNode();
temp->item=key;
if (last==NULL){
temp->link=temp;
return temp;
}
temp->link=last->link;
last->link=temp;
return last;
}
NODE insert_rear(NODE last,int key){
NODE temp=getNode();
temp->item=key;
if (last==NULL){
return temp;
}
temp->link=last->link;
0 0
Ln 1, Col 1 Spaces: 4 UTF-8 CRLF C Win32

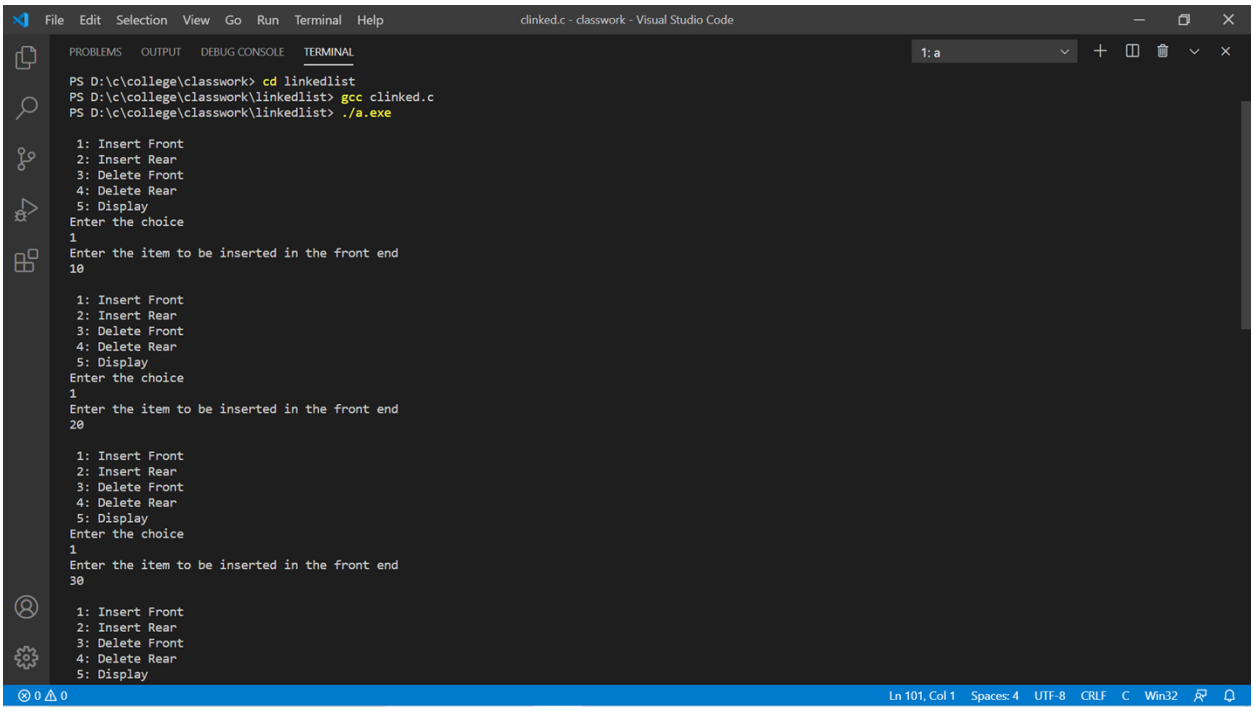

File Edit Selection View Go Run Terminal Help
clinked.c - classwork - Visual Studio Code
stack.c
clinked.c
linkedlist > clinked.c > display(NODE)
temp->link=last->link;
last->link=temp;
return temp;
}
NODE delete_front(NODE last){
NODE temp;
if (last==NULL){
printf("List is empty \n");
}
temp=last->link;
last->link=temp->link;
freeNode(temp);
return last;
}
NODE delete_rear(NODE last){
NODE prev,cur,l;
if (last==NULL){
printf("List is empty \n");
}
l=last;
cur=last->link;
do{
cur=cur->link;
}while(cur->link!=l);
cur->link=last->link;
return cur;
}
void display(NODE last){
if (last==NULL){
printf("List is empty\n");
}
0 0
Ln 62, Col 1 Spaces: 4 UTF-8 CRLF C Win32

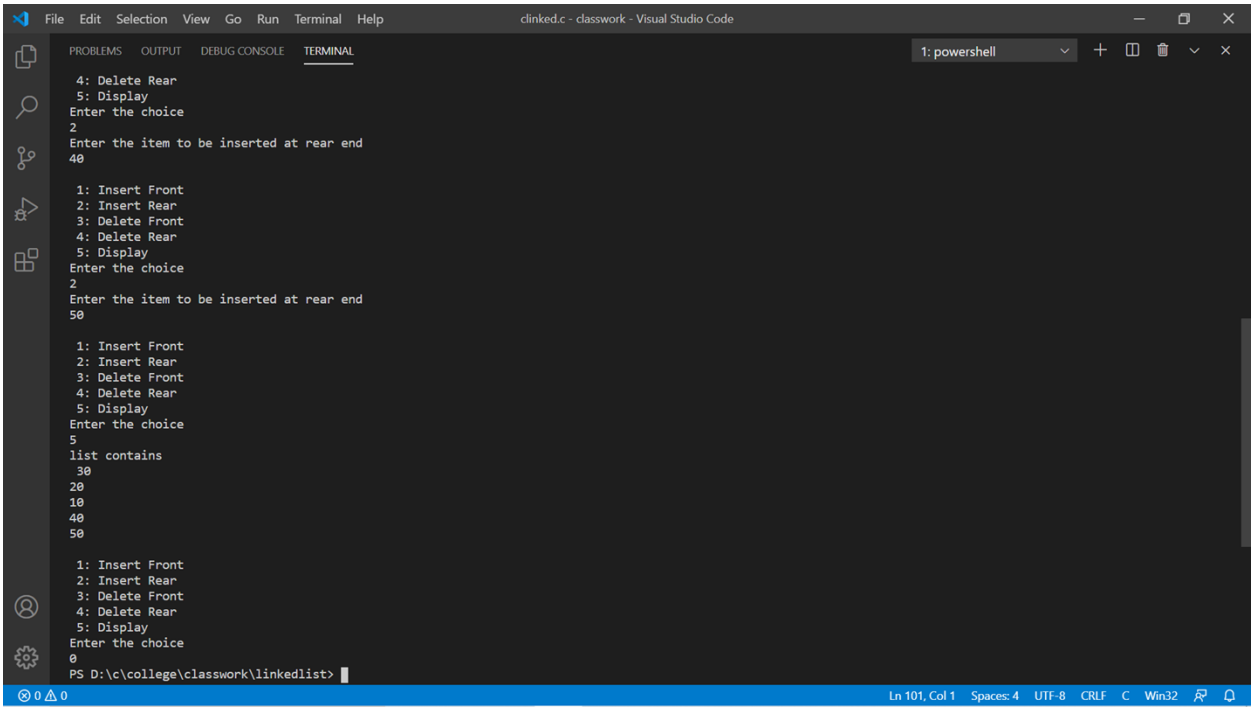



```c
void display(NODE last){
    if (last==NULL){
        printf("List is empty\n");
    }
    NODE cur=last;
    NODE l=last->link;
    do{
        cur=cur->link;
        printf("%d\n",cur->item);
    }while(cur->link!=l);
}
int main(){
    NODE last=NULL;
    int s,key;
    while(s!=0){
    printf("\n 1: Insert Front \n 2: Insert Rear \n 3: Delete Front \n 4: Delete Rear \n 5: Display \n");
    printf("Enter the choice \n");
    scanf("%d",&s);

    switch(s){
        case 0: exit(0);
        break;
        case 1:printf("Enter the item to be inserted in the front end \n");
            scanf("%d",&key);
            last=insert_front(last,key);
            break;
        case 2:printf("Enter the item to be inserted at rear end \n");
        scanf("%d",&key);
        last=insert_rear(last,key);
        break;
        case 3: printf("Item deleted at the front end \n");
        last=delete_front(last);
```




```c
int main(){
    NODE last=NULL;
    int s,key;
    while(s!=0){
    printf("\n 1: Insert Front \n 2: Insert Rear \n 3: Delete Front \n 4: Delete Rear \n 5: Display \n");
    printf("Enter the choice \n");
    scanf("%d",&s);

    switch(s){
        case 0: exit(0);
        break;
        case 1:printf("Enter the item to be inserted in the front end \n");
            scanf("%d",&key);
            last=insert_front(last,key);
            break;
        case 2:printf("Enter the item to be inserted at rear end \n");
        scanf("%d",&key);
        last=insert_rear(last,key);
        break;
        case 3: printf("Item deleted at the front end \n");
        last=delete_front(last);
        break;
        case 4: printf("Item deleted at the rear end \n");
        last=delete_rear(last);
        break;
        case 5: printf("list contains \n ");
        display(last);
    }
    }
    return 0;
}
```


File Edit Selection View Go Run Terminal Help
clinked.c - classwork - Visual Studio Code
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
1: a
PS D:\c\college\classwork> cd linkedlist
PS D:\c\college\classwork\linkedlist> gcc clinked.c
PS D:\c\college\classwork\linkedlist> ./a.exe
1: Insert Front
2: Insert Rear
3: Delete Front
4: Delete Rear
5: Display
Enter the choice
1
Enter the item to be inserted in the front end
10
1: Insert Front
2: Insert Rear
3: Delete Front
4: Delete Rear
5: Display
Enter the choice
1
Enter the item to be inserted in the front end
20
1: Insert Front
2: Insert Rear
3: Delete Front
4: Delete Rear
5: Display
Enter the choice
1
Enter the item to be inserted in the front end
30
1: Insert Front
2: Insert Rear
3: Delete Front
4: Delete Rear
5: Display
Ln 101, Col 1 Spaces: 4 UTF-8 CRLF C Win32


File Edit Selection View Go Run Terminal Help
clinked.c - classwork - Visual Studio Code
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
1: powershell
4: Delete Rear
5: Display
Enter the choice
2
Enter the item to be inserted at rear end
40
1: Insert Front
2: Insert Rear
3: Delete Front
4: Delete Rear
5: Display
Enter the choice
2
Enter the item to be inserted at rear end
50
1: Insert Front
2: Insert Rear
3: Delete Front
4: Delete Rear
5: Display
Enter the choice
5
list contains
30
20
10
40
50
1: Insert Front
2: Insert Rear
3: Delete Front
4: Delete Rear
5: Display
Enter the choice
0
PS D:\c\college\classwork\linkedlist>
Ln 101, Col 1 Spaces: 4 UTF-8 CRLF C Win32