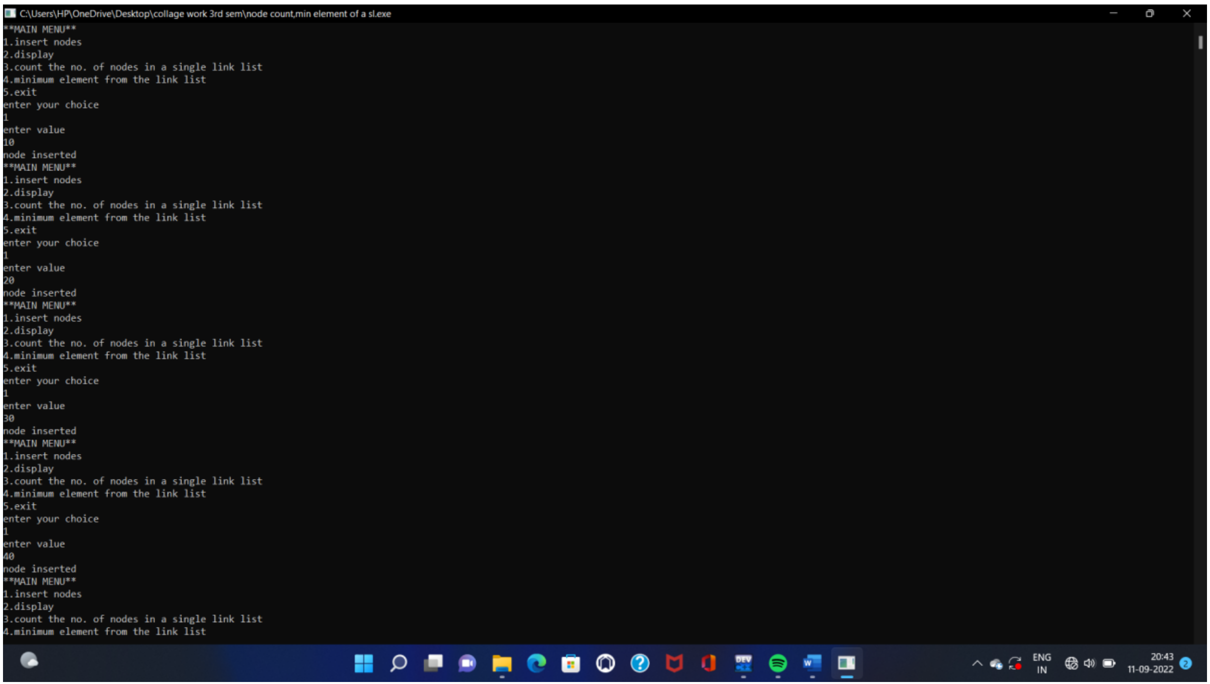
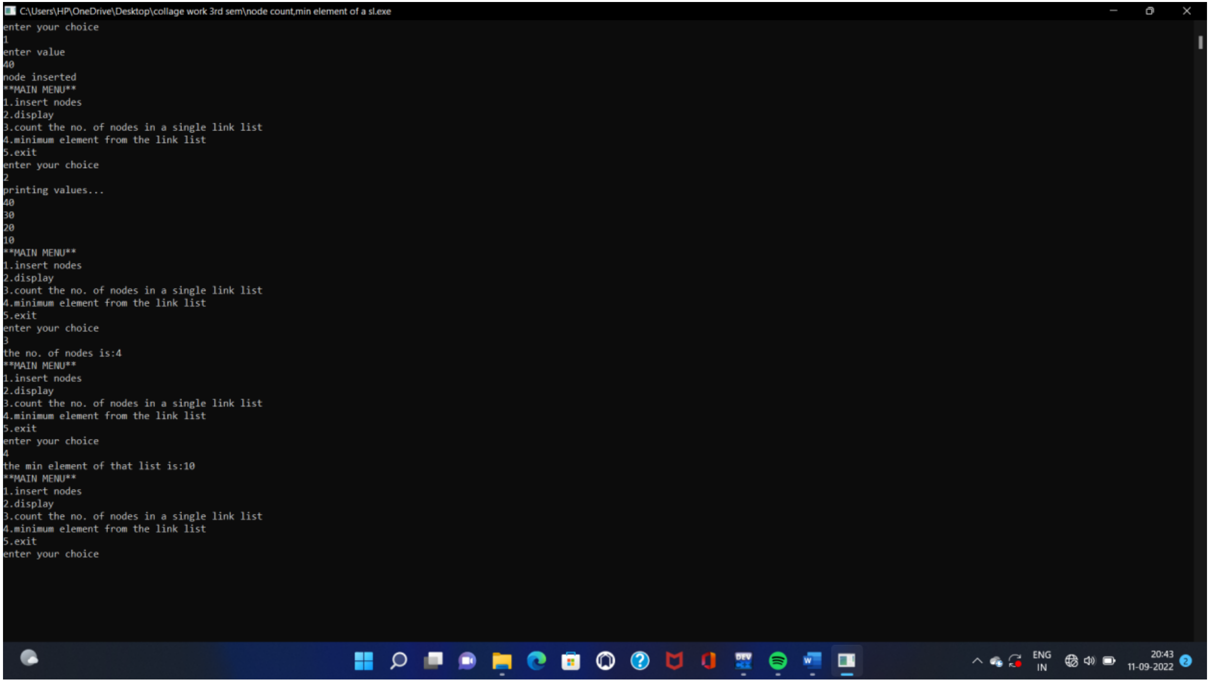
```
/*node count,min element of a link list*/
#include<stdio.h>
#include<stdlib.h>
struct node
{
        int data;
        struct node *next;
};
struct node*header;
void beginsert();
void display();
void node_count();
void min_element();
int main()
{
        int ch=0;
        while(ch!=5)
        {
        printf("**MAIN MENU**\n");
        printf("1.insert nodes\n2.display\n3.count the no. of nodes in a single link list\n4.minimum element from the link list\n5.exit\n");
        printf("enter your choice\n");
        scanf("%d",&ch);
        switch(ch)
        {
                case 1:beginsert();
                break;
                case 2:display();
                break;
                case 3:node_count();
                break;
```

```
                    case 4:min_element();
                    break;
                    case 5:exit(0);
                    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->next=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->next;
        }
    }
}
void node_count()
{
    int count=1;
    struct node*ptr;
    ptr=header->next;
    while(ptr!=NULL)
    {
        ++count;
        ptr=ptr->next;
    }
    printf("the no. of nodes is:%d\n",count);

}
void min_element()
{
    int min;
    struct node*ptr;
    ptr=header->next;

    min=ptr->data;

    ptr=ptr->next;

    while(ptr!=NULL)

    {

        if(ptr->data<min)

        {

            min=ptr->data;

        }

        ptr=ptr->next;

    }

    printf("the min element of that list is:%d\n",min);

}
```


C:\Users\HP\OneDrive\Desktop\collage work 3rd sem\node count,min element of a sl.exe
ENG
IN
20:43
11-09-2022

```
**MAIN MENU**
1.insert nodes
2.display
3.count the no. of nodes in a single link list
4.minimum element from the link list
5.exit
enter your choice
1
enter value
10
node inserted
**MAIN MENU**
1.insert nodes
2.display
3.count the no. of nodes in a single link list
4.minimum element from the link list
5.exit
enter your choice
1
enter value
20
node inserted
**MAIN MENU**
1.insert nodes
2.display
3.count the no. of nodes in a single link list
4.minimum element from the link list
5.exit
enter your choice
1
enter value
30
node inserted
**MAIN MENU**
1.insert nodes
2.display
3.count the no. of nodes in a single link list
4.minimum element from the link list
5.exit
enter your choice
1
enter value
40
node inserted
**MAIN MENU**
1.insert nodes
2.display
3.count the no. of nodes in a single link list
4.minimum element from the link list
```


C:\Users\HP\OneDrive\Desktop\collage work 3rd sem\node count,min element of a sl.exe
ENG
IN
20:43
11-09-2022

```
enter your choice
1
enter value
40
node inserted
**MAIN MENU**
1.insert nodes
2.display
3.count the no. of nodes in a single link list
4.minimum element from the link list
5.exit
enter your choice
2
printing values...
40
30
20
10
**MAIN MENU**
1.insert nodes
2.display
3.count the no. of nodes in a single link list
4.minimum element from the link list
5.exit
enter your choice
3
the no. of nodes is:4
**MAIN MENU**
1.insert nodes
2.display
3.count the no. of nodes in a single link list
4.minimum element from the link list
5.exit
enter your choice
4
the min element of that list is:10
**MAIN MENU**
1.insert nodes
2.display
3.count the no. of nodes in a single link list
4.minimum element from the link list
5.exit
enter your choice
```