

/\*node count,min element in sll\*/

```
#include<stdio.h>
```

```
#include<stdlib.h>
```

```
struct node{
```

```
    int data;
```

```
    struct node*link;
```

```
};
```

```
struct node*header;
```

```
struct node*create_sll(struct node*);
```

```
struct node*display(struct node*);
```

```
void node_count();
```

```
void min_element();
```

```
int main()
```

```
{
```

```
    int ch;
```

```
    while(ch!=5)
```

```
    {
```

```
        printf("main menu\n");
```

```
        printf("1.create list\n2.display\n3.count no of nodes in the sll\n4.minimum element  
of the sll\n5.exit\n");
```

```
        printf("enter your choice\n");
```

```
        scanf("%d",&ch);
```

```
        switch(ch)
```

```
        {
```

```
            case 1:header=create_sll(header);
```

```
            break;
```

```
            case 2:header=display(header);
```

```
            break;
```

```
            case 3:node_count();
```

```
            break;
```

```
            case 4:min_element();
```

```

        break;

        case 5:exit(0);

        default:

            printf("invalid choice\n");

    }

}

}

struct node*create_sll(struct node*header)
{

    int item;

    struct node*new_node,*ptr;

    printf("enter -1 to end\n");

    printf("enter your data:\n");

    scanf("%d",&item);

    while(item!=-1)

    {

        new_node=(struct node*)malloc(sizeof(struct node*));

        new_node->data=item;

        if(header==NULL)

        {

            new_node->link=NULL;

            header=new_node;

        }

        else

        {

            ptr=header;

            while(ptr->link!=NULL)

            {

                ptr=ptr->link;

            }

            ptr->link=new_node;

```

```

        new_node->link=NULL;
    }
    printf("enter your data:\n");
    scanf("%d",&item);
}
printf("list created\n");
return header;
}

struct node*display(struct node*header)
{
    printf("the list is below\n");
    struct node*ptr;
    ptr=header;
    while(ptr!=NULL)
    {
        printf("%d\n",ptr->data);
        ptr=ptr->link;
    }
    return header;
}

void node_count()
{
    int count=0;
    struct node*ptr;
    ptr=header;
    while(ptr!=NULL)
    {
        ++count;
        ptr=ptr->link;
    }
    printf("the no of nodes i that sll:%d\n",count);
}

```

```

}

void min_element()
{
    int min;

    struct node*ptr;

    ptr=header;

    min=ptr->data;

    ptr=ptr->link;

    while(ptr!=NULL)
    {
        if(ptr->data<min)
        {
            min=ptr->data;
        }

        ptr=ptr->link;
    }

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

```

```

C:\Users\HP\OneDrive\Desktop >
main menu
1.create list
2.display
3.count no of nodes in the sll
4.minimum element of the sll
5.exit
enter your choice
3
the no of nodes i that sll:4
main menu
1.create list
2.display
3.count no of nodes in the sll
4.minimum element of the sll
5.exit
enter your choice
4
the minimum element of that sll is:10
main menu
1.create list
2.display
3.count no of nodes in the sll
4.minimum element of the sll
5.exit
enter your choice
5
-----
Process exited after 20.22 seconds with return value 0
Press any key to continue . . .

```