/\*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);

}

