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

struct node
{
int data;
struct node *link;
};
void traverse(struct node *head);
void search(struct node *head);
void main()
{
struct node *head = (struct node*)malloc(sizeof(struct node));
head->data = 10;
head->link = NULL;
struct node *current = (struct node*)malloc(sizeof(struct node));
current->data = 20;
current->link = NULL;
head->link = current;
current = (struct node*)malloc(sizeof(struct node));
current->data = 30;
current->link = NULL;
head->link->link = current;
current = (struct node*)malloc(sizeof(struct node));
current->data = 40;
current->link = NULL;
head->link->link->link = current;
printf("single linked list");
printf("%d->%d->%d->%d",head->data,head->link->data,head->link->link->data,head->link->link->link->data);
traverse(head);
search(head);
}
void traverse(struct node *head)
{
struct node *temp = head;
if(temp == NULL)
printf("Linked list is empty");
temp = NULL;
while(temp!=NULL)
{
printf("%d",temp->data);
temp=temp->link;
}
}
void search(struct node *head)
{
int select = 20,c=0;
```

```c
struct node *temp = head;
while(temp!=NULL)
{
c++;
if (select== temp->data)
        printf("\nsearch found,element=%d at %d\n",temp->data,c);
//else
//        printf("\nsearch not found");
temp = temp->link;
}
}
```