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3=[↑↓]

```
#include<stdio.h>
#include<stdlib.h>
struct node
{
    int data;
    struct node *link;
};
struct node *head=NULL;
struct node *newnode;

struct node *createnode(int data)
{
    struct node *temp=(struct node*)(malloc(sizeof(struct node)));
    temp->data=data;
    temp->link=NULL;
    return temp;
}
void insertnode(int data)
{
    if(head==NULL)
    {
```

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3=[↑↓]

```
if(head==NULL)
{
head=createnode(data);
}
else
{
struct node*temp=head;
while(temp->link!=NULL)
{
temp=temp->link;
}
newnode=createnode(data);
temp->link=newnode;
}
}
struct node*search(data)
{
struct node *temp=head;
while(temp!=NULL)
{
if(temp->data==data)
```

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3=[↑↓]

```
if(temp->data==data)
{
return temp;
}
temp=temp->link;
}
return NULL;
}
void printlinkedlist()
{
struct node *temp=head;
int i=1;
while(temp!=NULL)
{
printf("\n Node %d:%d",i,temp->data);
temp=temp->link;
i++;
}
}
int main()
{
```

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3=[↑↓]

```
temp=temp->link;
i++;
}
}
int main()
{
int n,i,data,x;
printf("\n Enter the number of node:");
scanf("%d",&n);
i=0;
while(i<n)
{
printf("\n Enter the %d node:",i+1);
scanf("%d",&data);
insertnode(data);
i++;
}
printlinkedlist();
return 0;
}
```

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F1 Help F2 Save F3 Open Alt-F9 Compile F9 Make F10 Menu

Enter the number of node: 4

Enter the 1 node: 4

Enter the 2 node: 6

Enter the 3 node: 7

Enter the 4 node:8

Node 1:4

Node 2:6

Node 3:7

Node 4:8

Enter the number of node: _

Program - 4

Program to implement singly linked list

prog -

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

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

```
struct node
```

```
{
```

```
int data;
```

```
struct node *link;
```

```
};
```

```
struct node *head = NULL
```

```
struct node *newnode;
```

```
struct node *createNode(int data)
```

```
{
```

```
struct node *temp = (struct node *) (malloc  
    (sizeof (struct node)));
```

```
temp->data = data;
```

```
temp->link = NULL;
```

```
return temp;
```

```
}
```

```
void insertNode(int data)
```

```
{  
    if (head == NULL)
```

```
{
```

if (head == NULL)

{ head = createNode(data);

}

else
{ struct node *temp = head;

while (temp->link != NULL)

{ temp = temp->link;

}

newNode = createNode(data);

temp->link = newNode;

}

}

struct node *search(data)

{

struct node *temp = head;

while (temp != NULL)

{

if (temp->data == data)

struct node *search (data)

{

struct node *temp = head;

while (temp != NULL)

{

if (temp->data == data)

{

return temp;

}

temp = temp->link;


```
}  
return NULL;
```

```
}  
void printlinkedlist()
```

```
{  
    struct node *temp = head;
```

```
    int i = 1;
```

```
    while (temp != NULL)
```

```
{  
    printf ("In node %d : %d", i, temp->data);
```

```
    temp = temp->link;
```

```
    i++;
```

```
}  
}
```

```
int main()
```

```
{  
    int n, i, data;
```

```
    printf ("Enter the number of node");
```

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

```
    i = 0;
```

```
    while (i < n)
```

```
{  
    printf ("Enter the %d node: ", i+1);
```

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

```
    insertnode (data);
```

```
    i++;
```

```
}
```

```
    printlinkedlist();
```

```
    return 0;
```

```
}
```


OUTPUT

Singly Linked List

Enter the number of node: 4

Enter the 1 node: 4

Enter the 2 node: 6

Enter the 3 node: 7

Enter the 4 node: 8

Node1: 4

Node2: 6

Node3: 7

Node4: 8