Insertion into CLL

1. insertion before the head
2. insertion after the last
3. general case

prev=Null, temp=Head

while(temp->data < Newnode->data && temp->next !=Head

{prev=temp; temp=temp->next}

case 1: if(temp->data > Newnode->data && temp==Head) //insertion before the head

{ Newnode->next = temp;

Head=Newnode;

temp1=Head;

while( temp1->next!=Head) temp1=temp1->next;

temp1->next = Newnode;

}

case 2: else if(temp->data < Newnode->data && temp->next ==Head)

{Newnode->next = temp->next // point to head

temp->next = Newnode

}

case 3: else

{ Newnode->next = temp

Prev->next = Newnode

}

Deletion:

Search the element to be deleted

temp=Head

Prev= Null

while(temp->data != Key && temp->next != Head)

{prev=temp; temp=temp->next}

1. if (temp->data == Key && temp= Head && temp->next != Head) // delete first element

{ Head= temp->next;

temp1=head;

while( temp1->next!=Head)

temp1=temp1->next;

temp1->next =Head

free(temp)

}

1. if (temp->data == Key && temp->next == Head) // delete last element

{ prev->next = temp->next

free(temp)

}

if (temp->data == key && temp->next == head) // deleting only element

{ Head = null;

free(temp);

}

1. generic case

Else

{Prev->next = temp->next

free(temp)

}