Insert operation in Linked List

An algorithm to insert a node at the beginning of the singly linked list:

let *head be the pointer to first node in the current list

1. Create a new node using malloc function
   NewNode=(NodeType)malloc(sizeof(NodeType));*
2. Assign data to the info field of new node
   NewNode->info=newItem;
3. Set next of new node to head
   NewNode->next=head;
4. Set the head pointer to the new node
   head=NewNode;
5. End

An algorithm to insert a node at the end of the singly linked list:

let *head be the pointer to first node in the current list

1. Create a new node using malloc function
   NewNode=(NodeType)malloc(sizeof(NodeType));*
2. Assign data to the info field of new node
   NewNode->info=newItem;
3. Set next of new node to NULL
   NewNode->next=NULL;
4. if (head ==NULL)then
   Set head =NewNode.and exit.
5. Set temp=head;
6. while(temp->next!=NULL)
   temp=temp->next; //increment temp
7. *Set temp->next=NewNode;*
8. End

An algorithm to insert a node after the given node in singly linked list:

let *head be the pointer to first node in the current list and *p be the pointer to the node after which we want to insert a new node.

1. Create a new node using malloc function
   NewNode=(NodeType)malloc(sizeof(NodeType));*
2. Assign data to the info field of new node
   NewNode->info=newItem;
3. Set next of new node to next of p
   NewNode->next=p->next;
4. Set next of p to NewNode
   p->next =NewNode..
5. End