

Linked list sheet

1-

```
Void list_head_insert(node*& head_ptr, const node::value_type& entry)
{
    Node *insert_ptr;
    Insert_ptr = new node;
    Insert_ptr->set_data(entry);
    Insert_ptr->set_link(head_ptr);
    Head_ptr = insert_ptr;
}
```

2-

Create a temporary variable of type class node and assigns p->next to the temporary variable – call this variable temp , Assign temp's next pointer to p's next pointer , Set the next pointer of the node after *p to NULL.

3-

```
Typedef struct Node;
Typedef Node* NodePtr;
Struct Node{
    Int x;
    NodePtr next;
};
Int main ()
```

```

{
    Int n;
    NodePtr head, ptr = NULL;
    Head = ptr;
    While (cin >> n){
        Ptr = new Node;
        Ptr->x = n;
        Ptr->next = NULL;
        Ptr = ptr->next;
    }
    NodePtr bling = head;
    While(bling != NULL){
        Cout << bling->x << endl;
        Bling = bling->next;
    }
    Return 0;
}

```

4-

```

Insert_ptr->set_link (previous_ptr->link() );
Previous_ptr->set_link (insert_ptr);

```

6-

```

Int sum_of_nodes(Node *head_ptr)
{
    Node *p;

```

```
Int sum = 0;
```

```
For (p = head_ptr; p!= NULL; p = p->link)
```

```
Sum = sum + p->data;
```

```
Return sum;
```

```
}
```

7-

```
Int product_of_nodes(Node *head_ptr)
```

```
{
```

```
Node *p;
```

```
Int product = 1;
```

```
For (p = head_ptr; p!= NULL; p = p->link)
```

```
Product = product * p->data;
```

```
Return product;
```

```
}
```