

```
struct node * sort_list (struct node * start)
{
```

```
    struct node * ptr1, * ptr2;
```

```
    int temp;
```

```
    ptr1 = start;
```

```
    while (ptr1 -> next != NULL)
```

```
    {
```

```
        ptr2 = ptr1 -> next;
```

```
        while (ptr2 != NULL)
```

```
        {
```

```
            if (ptr1 -> data > ptr2 -> data)
```

```
            {
```

```
                temp = ptr1 -> data;
```

```
                ptr1 -> data = ptr2 -> data;
```

```
                ptr2 -> data = temp;
```

```
            }
```

```
            ptr2 = ptr2 -> next;
```

```
        }
```

```
        ptr1 = ptr1 -> next;
```

```
    }
    display (start);
```

```
}
```

SLL - Insertion, deletion

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N/D  
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## Linked lists insertion output:

```
CA\Users\bmsce\Desktop\IBM22CS291\lins.exe
Enter 1. insert at the end
2. insert at the start
3. insert before a node
4. insert after a node
5. -1 to stop
Enter operation 1
Enter the element to insert at the end
5
Elements are: 5
Enter operation 2
Enter the element to insert at the start
4
Elements are: 4 5
Enter operation 3
Enter the element to insert
4
Enter the data of the node before which to insert
3
Node with data 3 not found. Cannot insert before the node.
Elements are: 4 5
Enter operation 3
Enter the element to insert
3
Enter the data of the node before which to insert
4
Elements are: 3 4 5
Enter operation 4
Enter the element to insert
8
Enter the data of the node after which to insert
4
Elements are: 3 4 8 5
Enter operation -1
Execution stopped

Process returned 0 (0x0) execution time : 66.235 s
Press any key to continue.
```

## Linked lists deletion output:

```
CA\Users\bmsce\Desktop\IBM22CS291\ldel.exe
Enter 1. insert
2. delete at the start
3. delete at the end
4. delete before a node
5. delete after a node
6. -1 to stop
Enter operation 1
Enter the element to insert
3
Elements are: 3
Enter operation 1
Enter the element to insert
4
Elements are: 3 4
Enter operation 1
Enter the element to insert
5
Elements are: 3 4 5
Enter operation 2
Deleted node: 3
Elements are: 4 5
Enter operation 3
Deleted node: 5
Elements are: 4
Enter operation 1
Enter the element to insert
5
Elements are: 4 5
Enter operation 4
Enter the data of the node before which to delete
5
Enter 1. insert
2. delete at the start
3. delete at the end
4. delete before a node
5. delete after a node
6. -1 to stop
Deleted node: 5
Elements are: 4
Enter operation
```