

CSE 220

ID: 20301138

Making a Node class:

Class Node:

```
def __init__(self):  
    self.data = 0  
    self.next = None.
```

Counting Nodes:

```
def num(self, head):
```

~~head = head.next~~

~~count += 1~~

total = 0

while ~~self.head~~ ^{self.head} is not None

head = head.next

~~count += 1~~

total += 1

return total.

Finding mid node:

def mid(head):

if ~~head is not~~ head is None!

Making a linked list class:

Class My List:

```
def __init__(self):
```

self.head = None.

```
def showlist(selfhead):
```

```
    if self.headhead is None:
```

```
        print("Empty list")
```

```
    new_node = head self.head
```

```
    while new_nodenew_node is not None not None
```

```
        print(head)
```

```
        print(new_node.data, end=">")
```

```
def reverse(selfhead):
```

```
    tmp1 = self.head
```

```
    tmp2 = None
```

```
    while (tmp1 is not None):
```

```
        next = tmp1.next
```

```
        tmp1.next = tmp2
```

```
        tmp2 = tmp1
```

```
        tmp1 = next
```

```
    self.head = tmp2
```

tail value will
become null.

def mid(self):

total = 0

nh = self.head

while nh is not None:

total += 1

nh = nh.next

if self.head is not None:

nh = self.head

for i in range(1, count):

~~if (i < count):~~

List¹⁰ = my_list()

List1.num(1)

List1.num(2)

List1.num(3)

List1.num(4)

List1.num(5)

~~List1.showlist()~~

List1.reverse()

List1.mid()

List1.show(list).