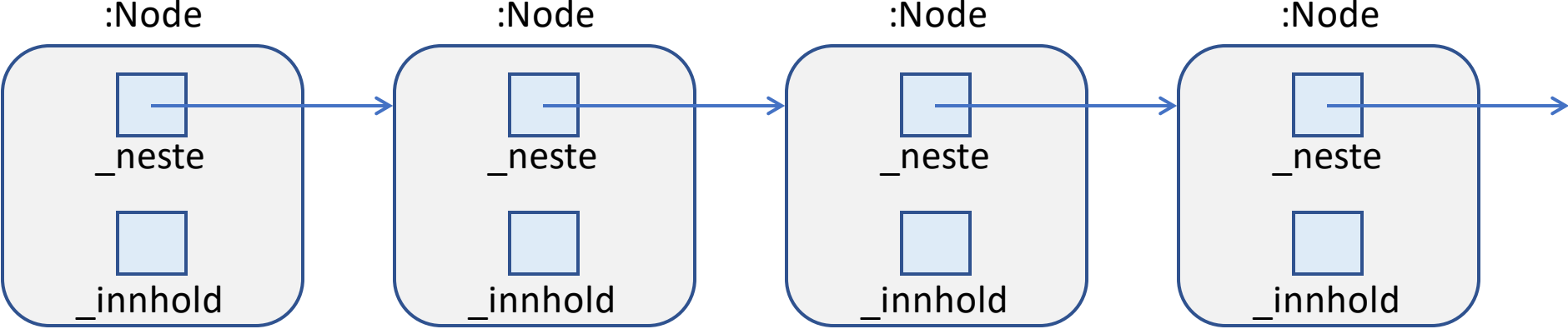
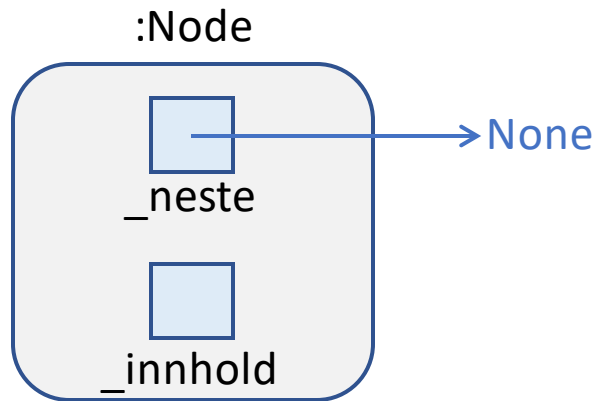


Datastrukturtegninger

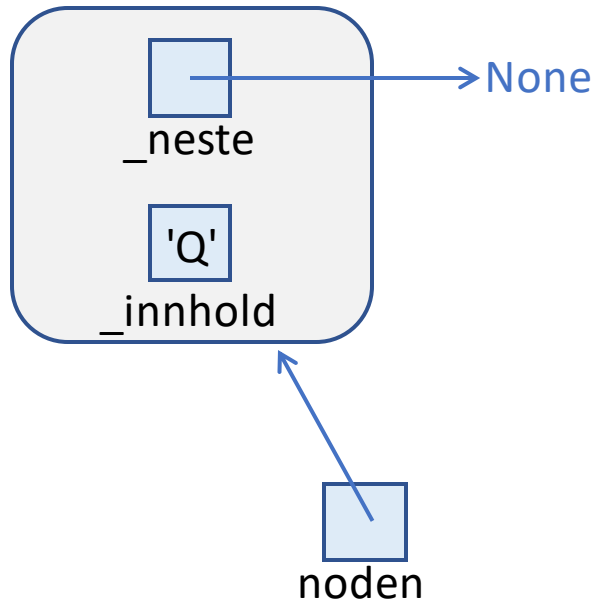
Tilstandsdiagrammer

Illustrert på et eksempel med lenkelister





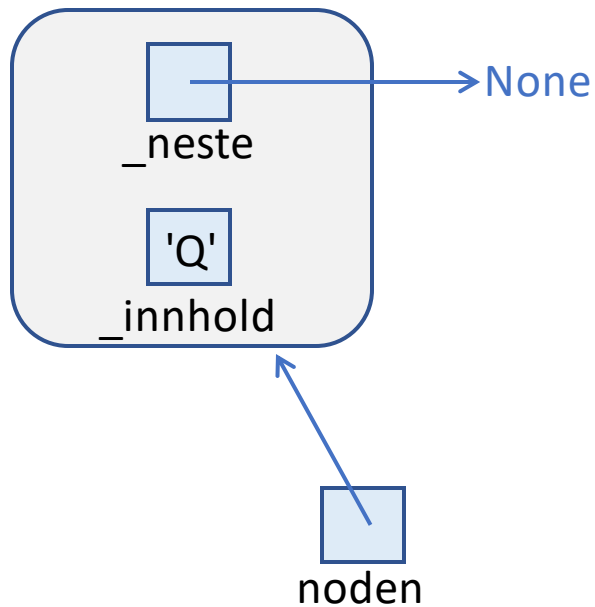
```
class Node :  
    def __init__(self, nytt) :  
        self._innhold = nytt  
        self._neste = None
```



```
class Node :  
    def __init__(self, nytt) :  
        self._innhold = nytt  
        self._neste = None
```

```
noden = Node("Q")
```

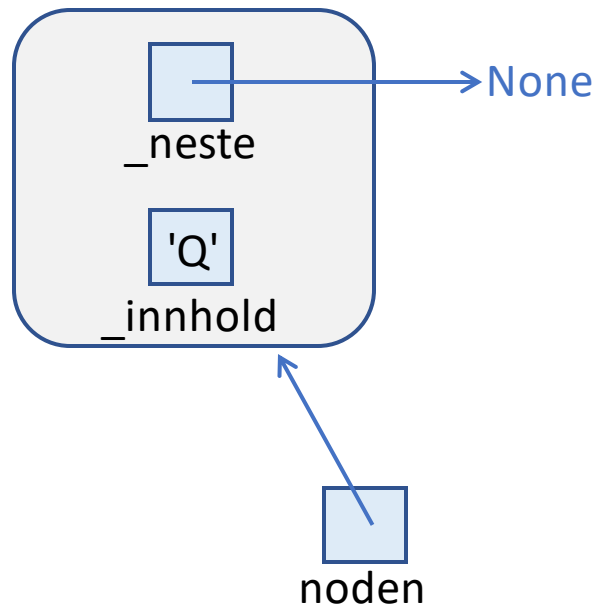
Tegning av muterbare objekter/verdier og immuterbare objekter/verdier



```
class Node :  
    def __init__(self, nytt) :  
        self._innhold = nytt  
        self._neste = None
```

3.14
pi

Tegning av muterbare objekter/verdier og immuterbare objekter/verdier

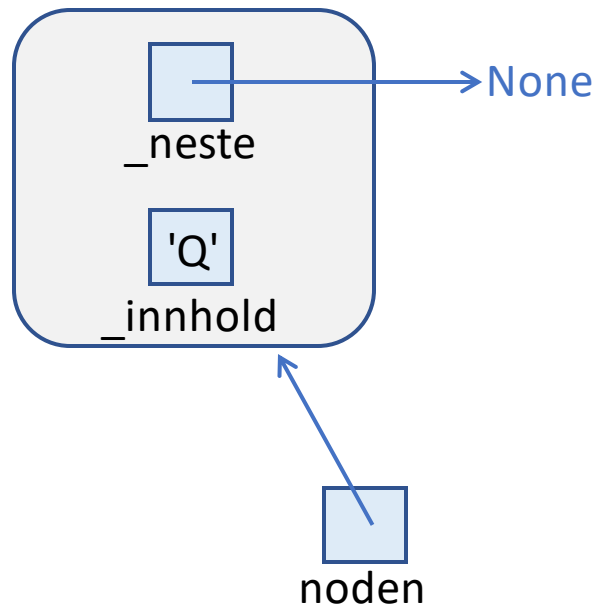


```
class Node :  
    def __init__(self, nytt) :  
        self._innhold = nytt  
        self._neste = None
```

3.14
pi

pi = 3.14
noden = Node("Q")

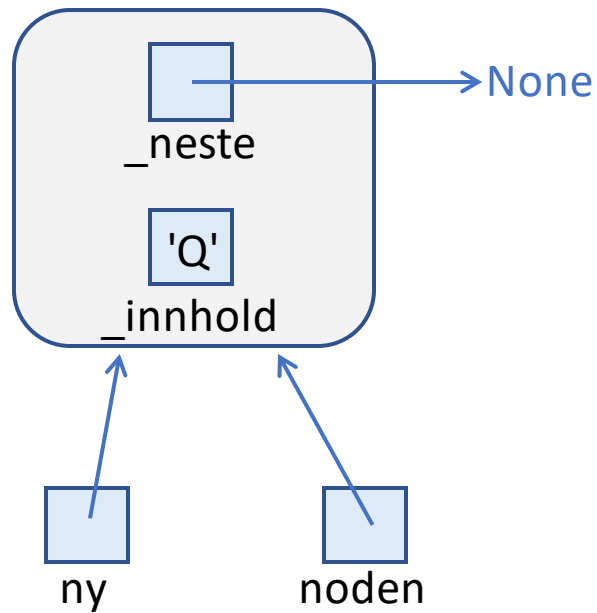
Tegning av muterbare objekter/verdier og immuterbare objekter/verdier



```
ny = noden  
tall = pi  
noden._neste = Node('A')  
noden = noden._neste  
t = ny._innhold
```

3.14
pi

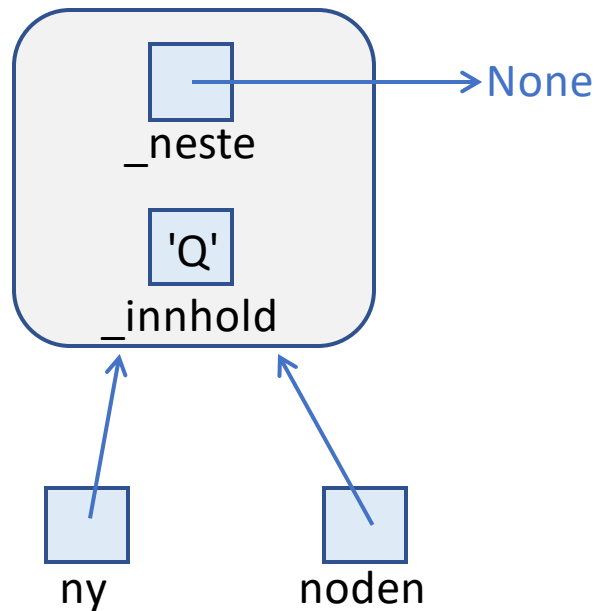
Tegning av muterbare objekter/verdier og immuterbare objekter/verdier



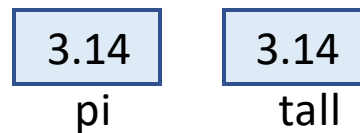
```
ny = noden  
tall = pi  
noden._neste = Node('A')  
noden = noden._neste  
t = ny._innhold
```

3.14
pi

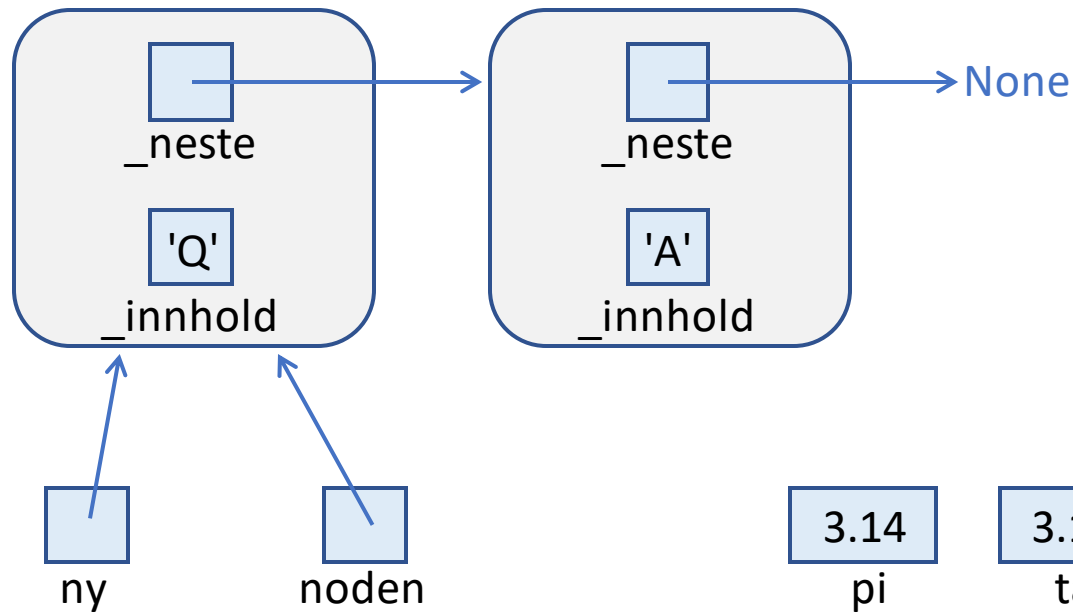
Tegning av muterbare objekter/verdier og immuterbare objekter/verdier



```
ny = noden  
tall = pi  
noden._neste = Node('A')  
noden = noden._neste  
t = ny._innhold
```

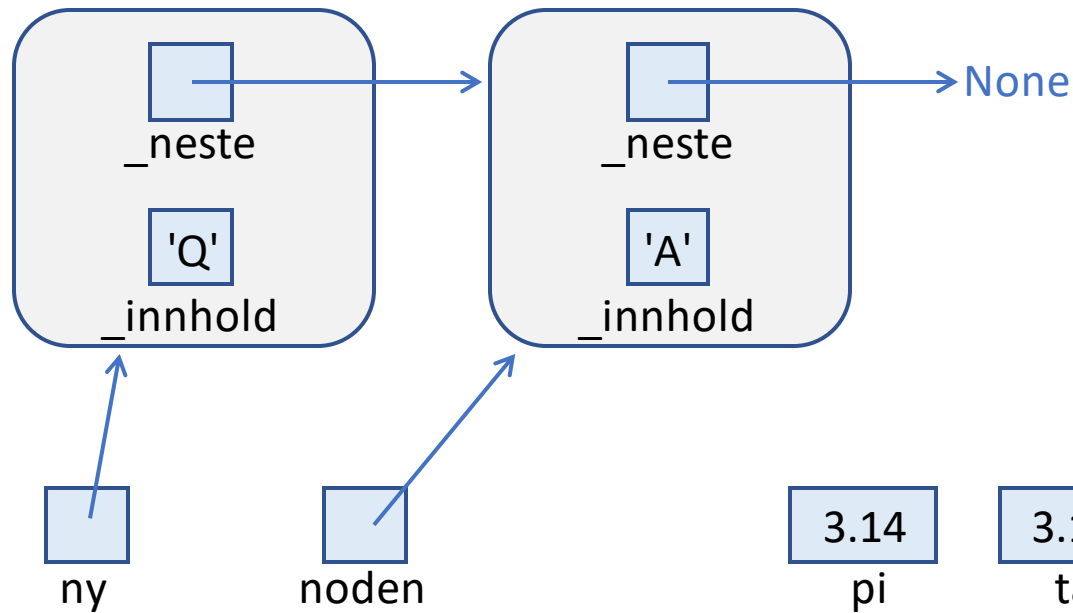


Tegning av muterbare objekter/verdier og immuterbare objekter/verdier



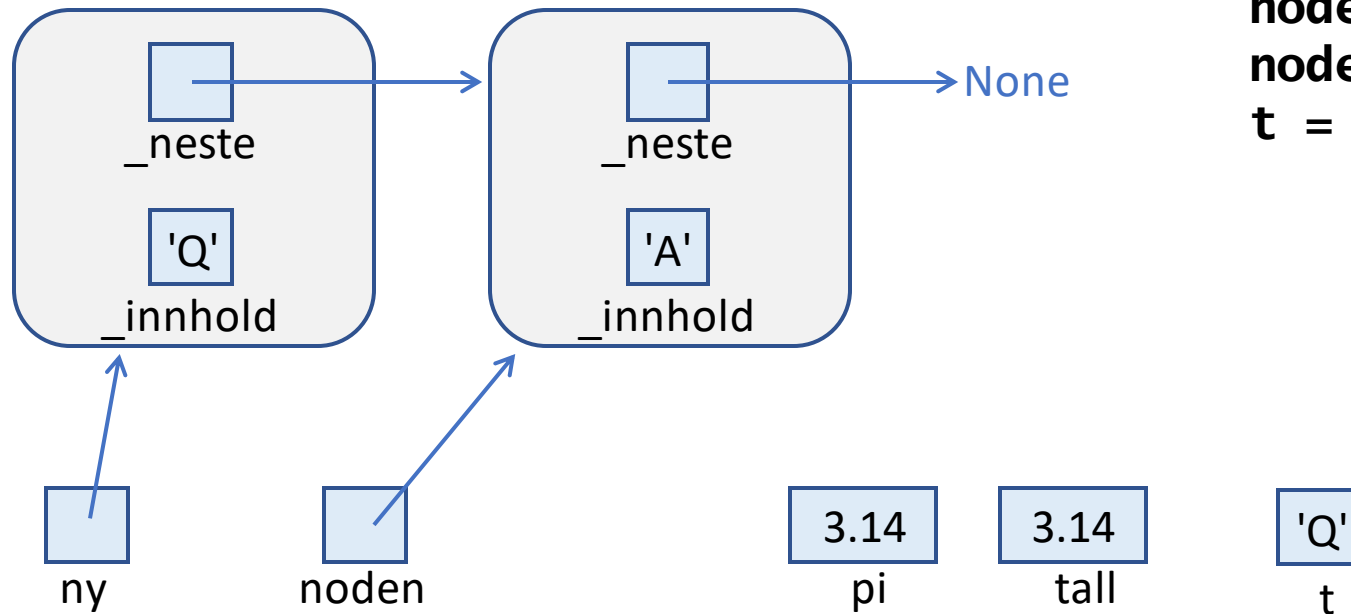
```
ny = noden  
tall = pi  
noden._neste = Node('A')  
noden = noden._neste  
t = ny._innhold
```

Tegning av muterbare objekter/verdier og immuterbare objekter/verdier

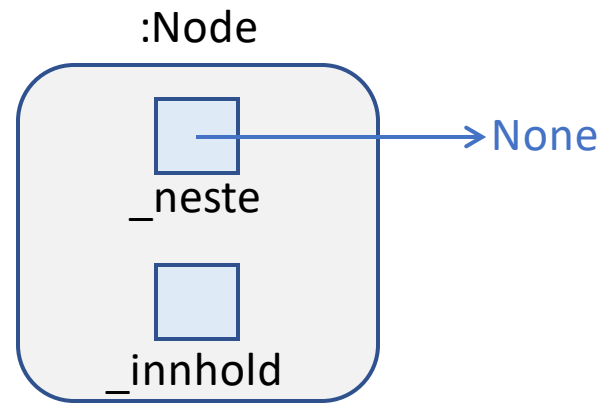


```
ny = noden  
tall = pi  
noden._neste = Node('A')  
noden = noden._neste  
t = ny._innhold
```

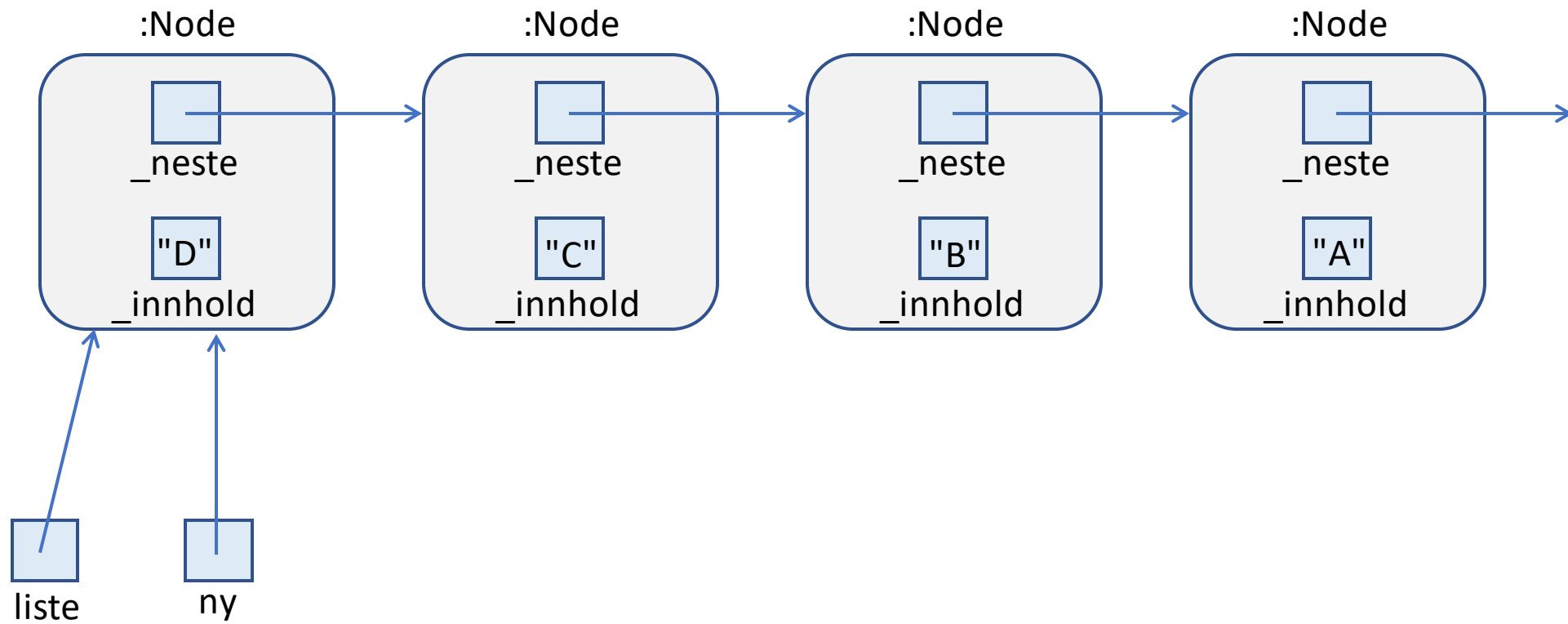
Tegning av muterbare objekter/verdier og immuterbare objekter/verdier



```
ny = noden  
tall = pi  
noden._neste = Node('A')  
noden = noden._neste  
t = ny._innhold
```



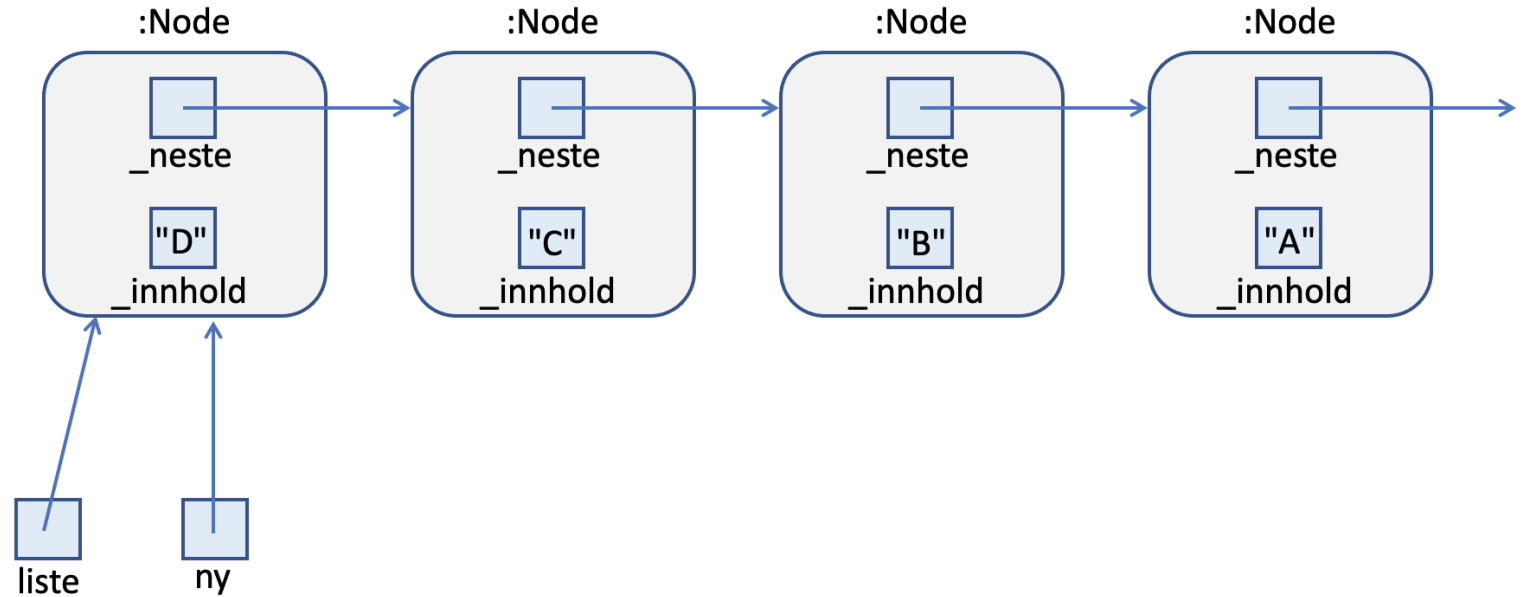
```
1 class Node :
2     def __init__(self, nytt) :
3         self._innhold = nytt
4         self._neste = None
5
6 liste = None
7 ny = Node("A")
8 ny._neste = liste
9 liste = ny
10 ny = Node("B")
11 ny._neste = liste
12 liste = ny
13 ny = Node("C")
14 ny._neste = liste
15 liste = ny
16 ny = Node("D")
17 ny._neste = liste
18 liste = ny
```



```

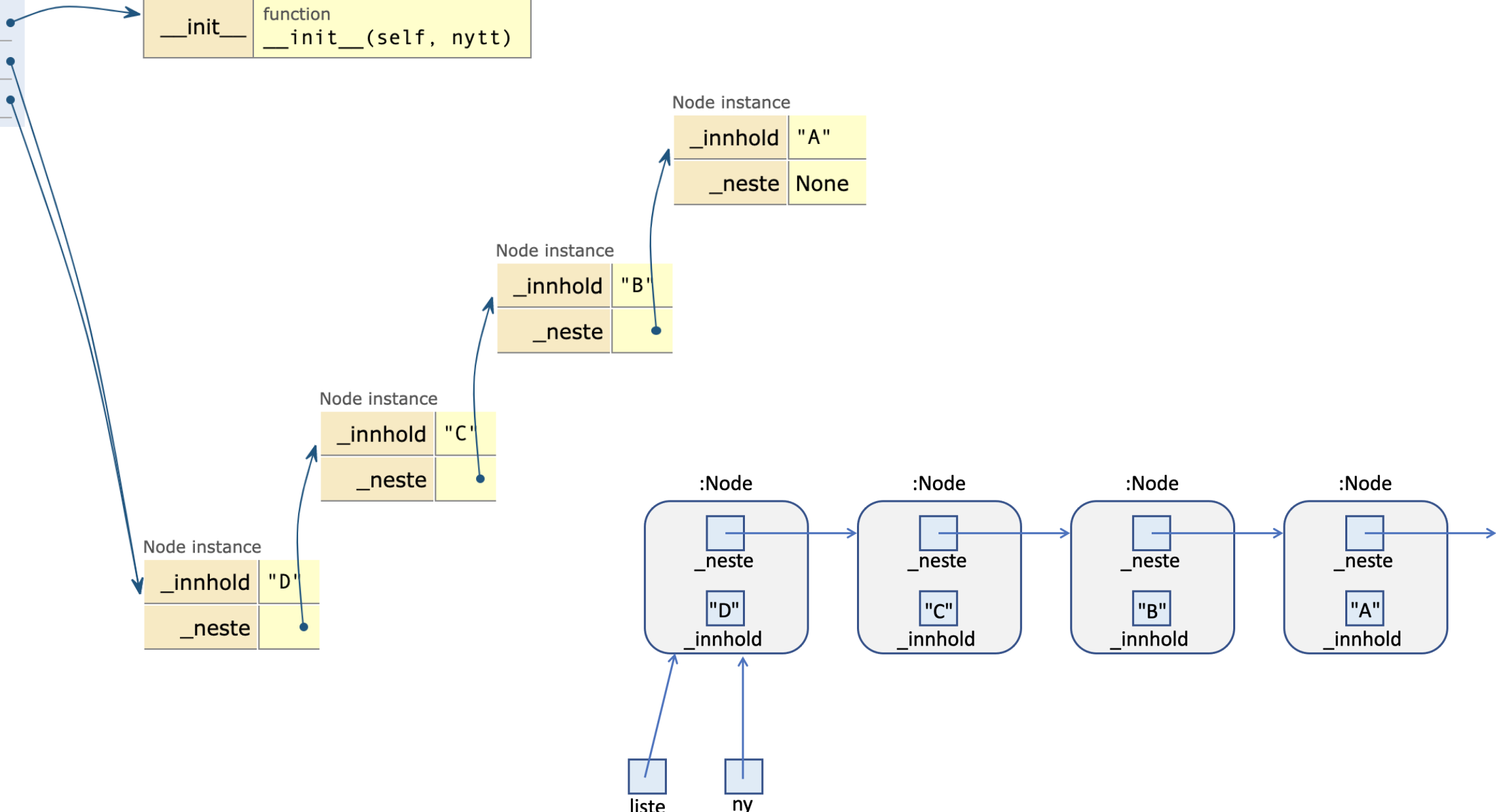
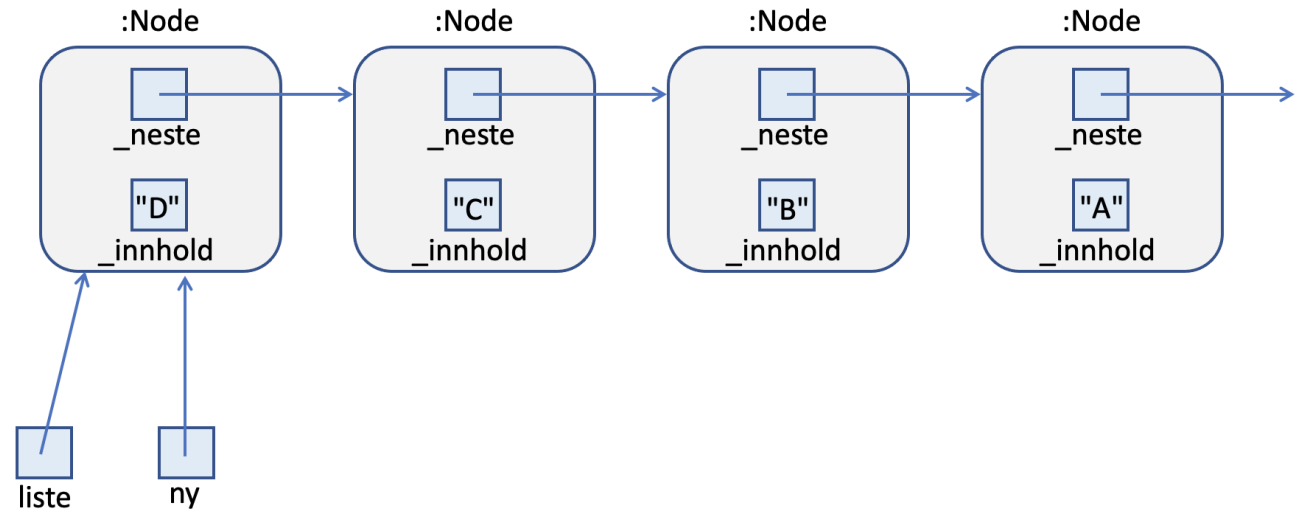
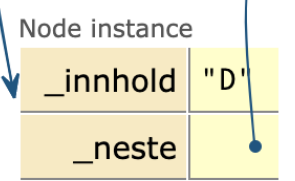
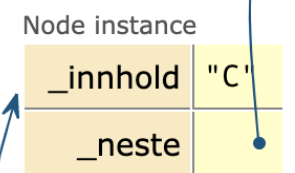
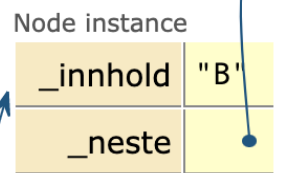
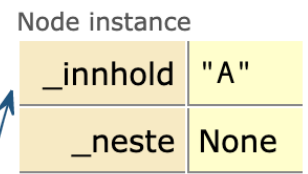
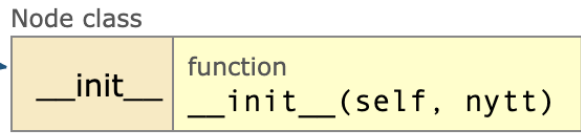
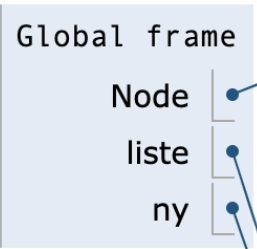
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5
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8 ny._neste = liste
9 liste = ny
10 ny = Node("B")
11 ny._neste = liste
12 liste = ny
13 ny = Node("C")
14 ny._neste = liste
15 liste = ny
16 ny = Node("D")
17 ny._neste = liste
18 liste = ny

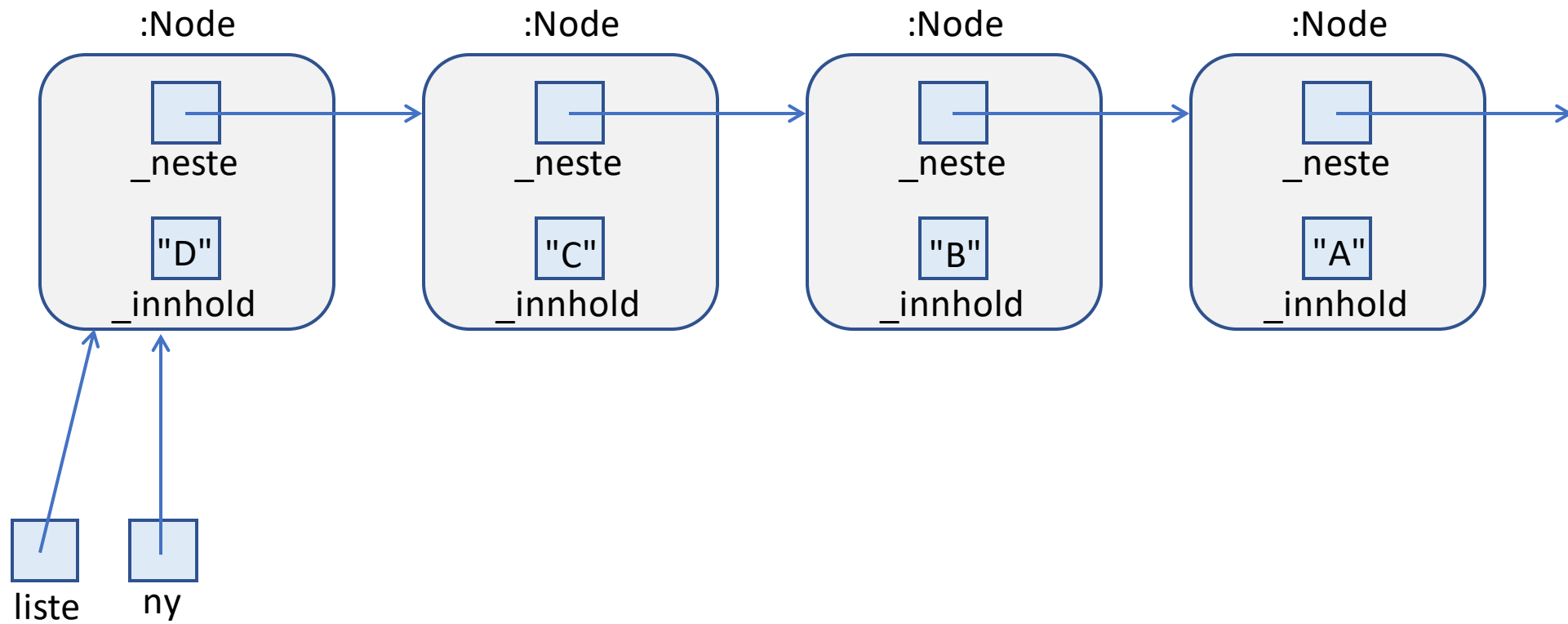
```



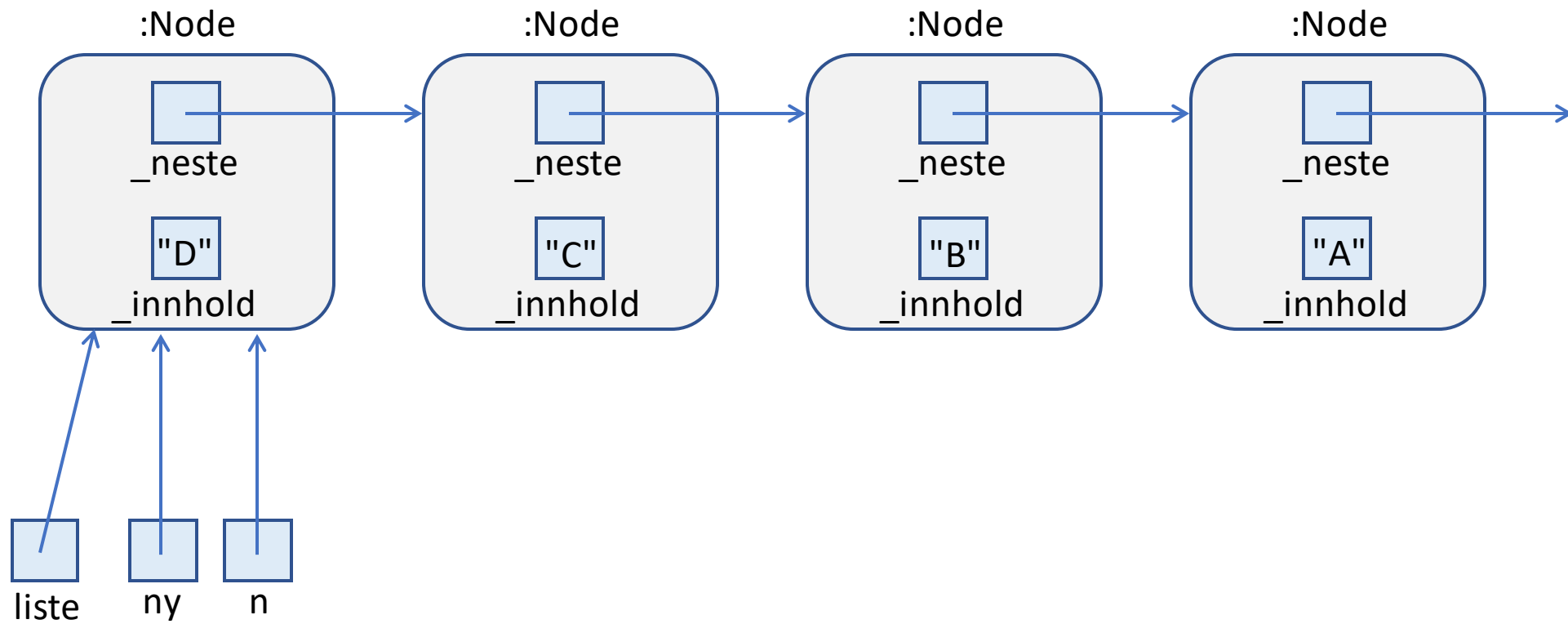
Frames

Objects

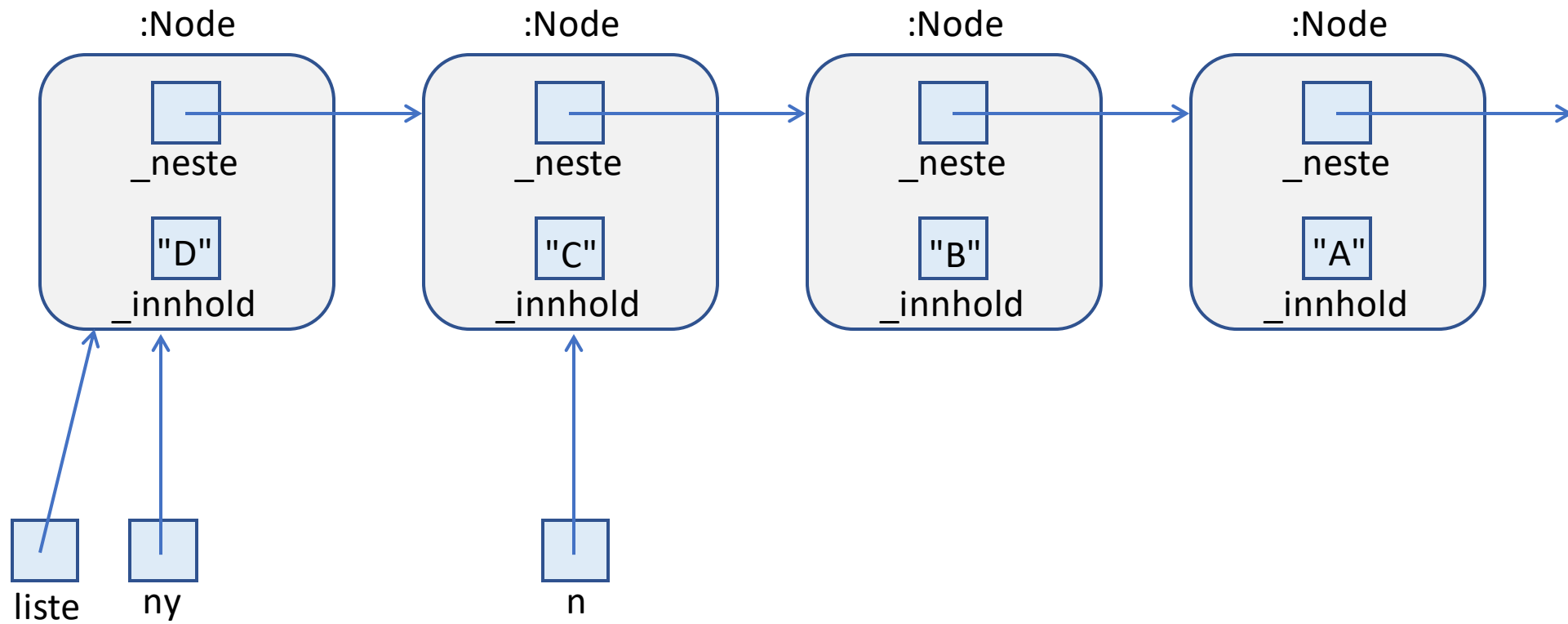




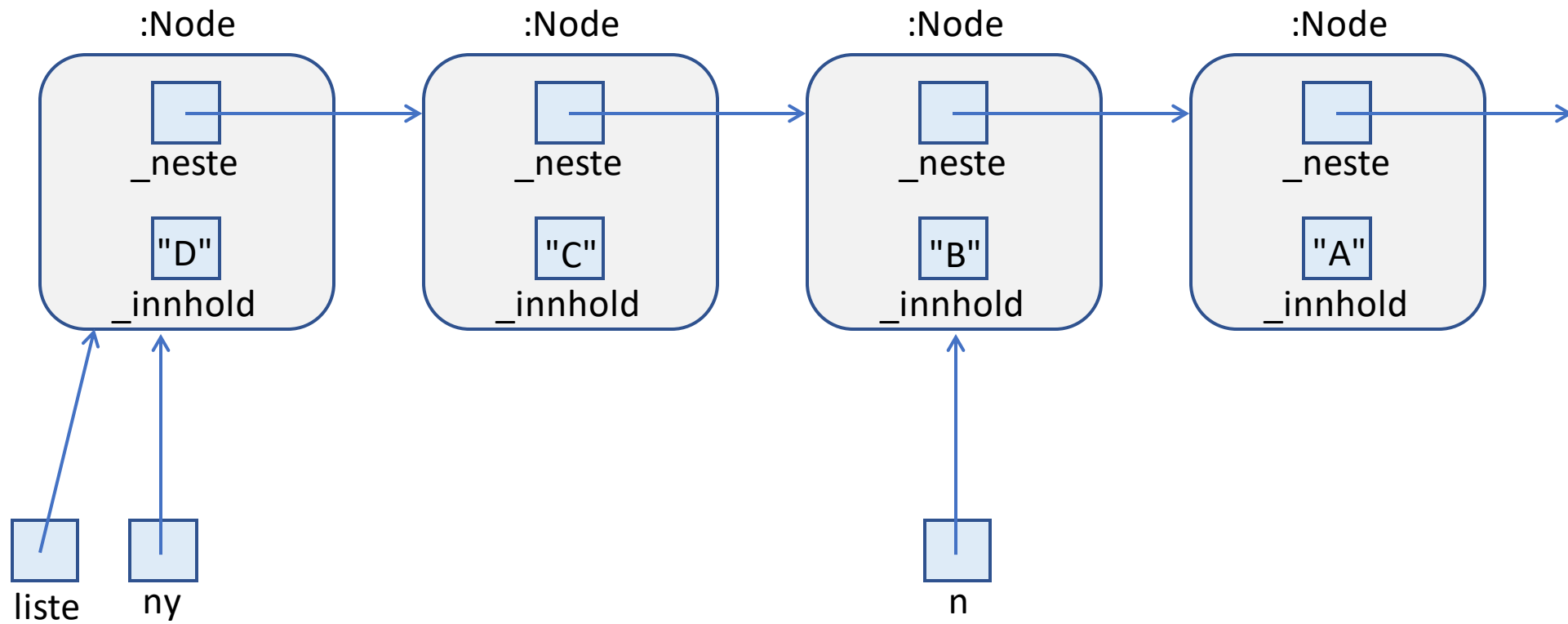
```
20 n = liste
21 while n != None:
22     print(n._innhold)
23     n = n._neste
```



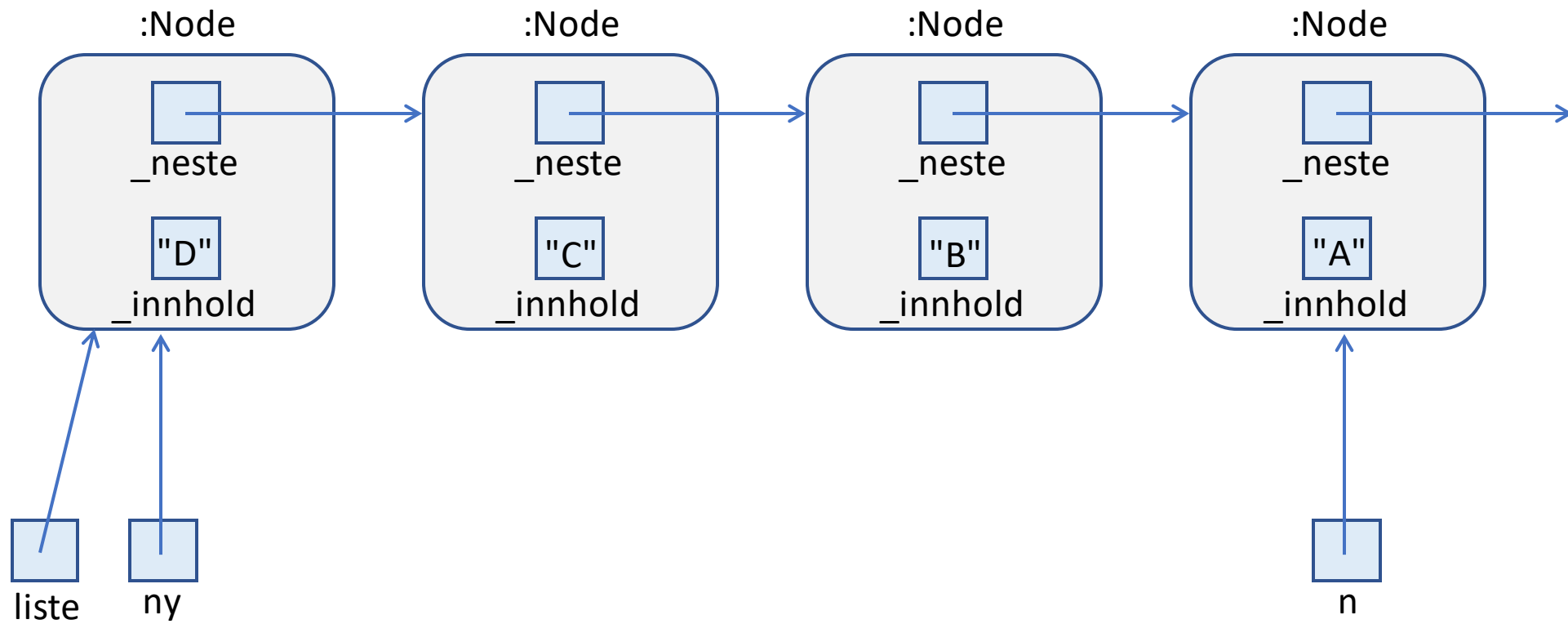
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21 while n != None:
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```



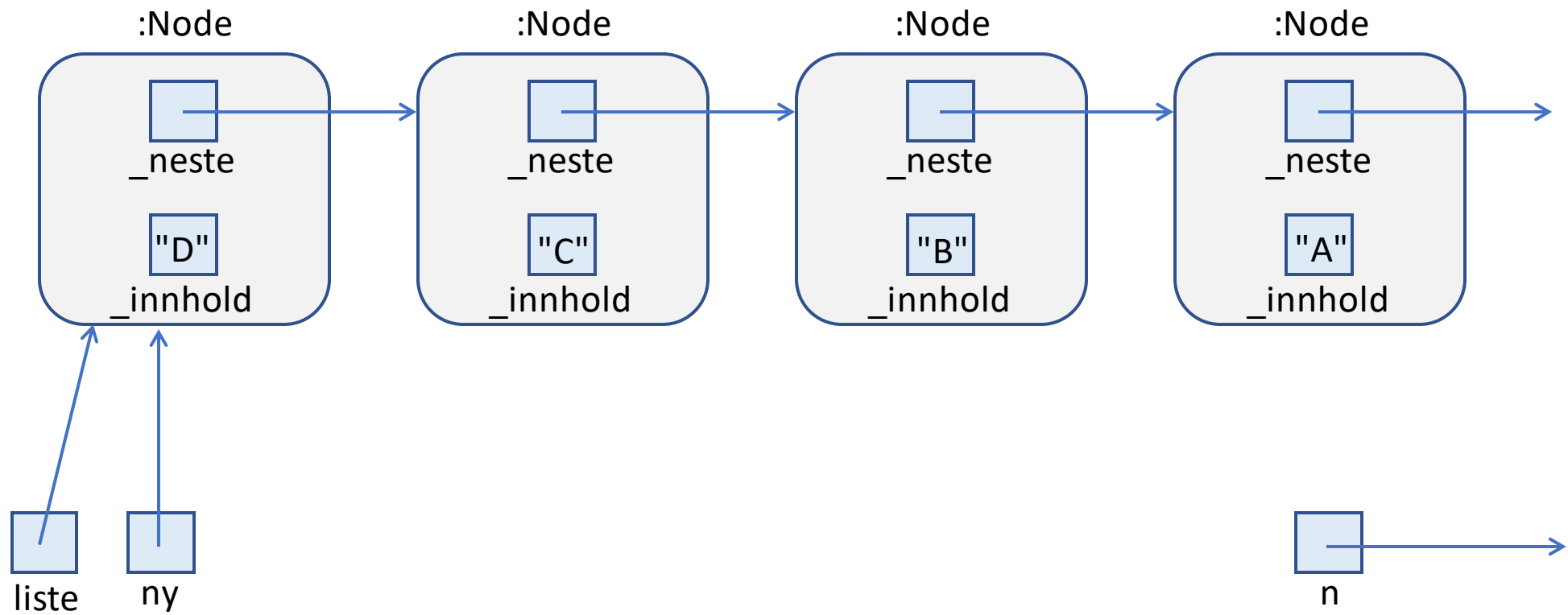
```
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```



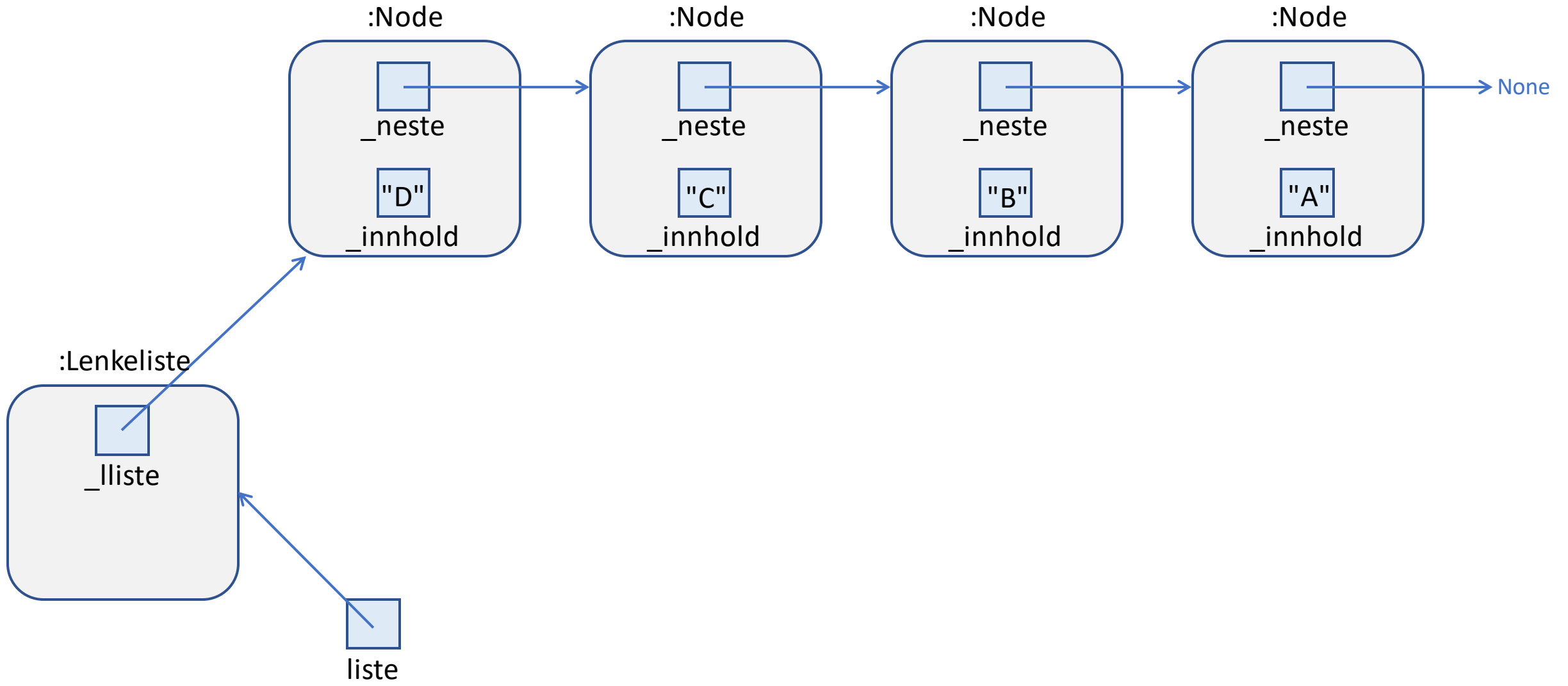
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21 while n != None:
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23     n = n._neste
```

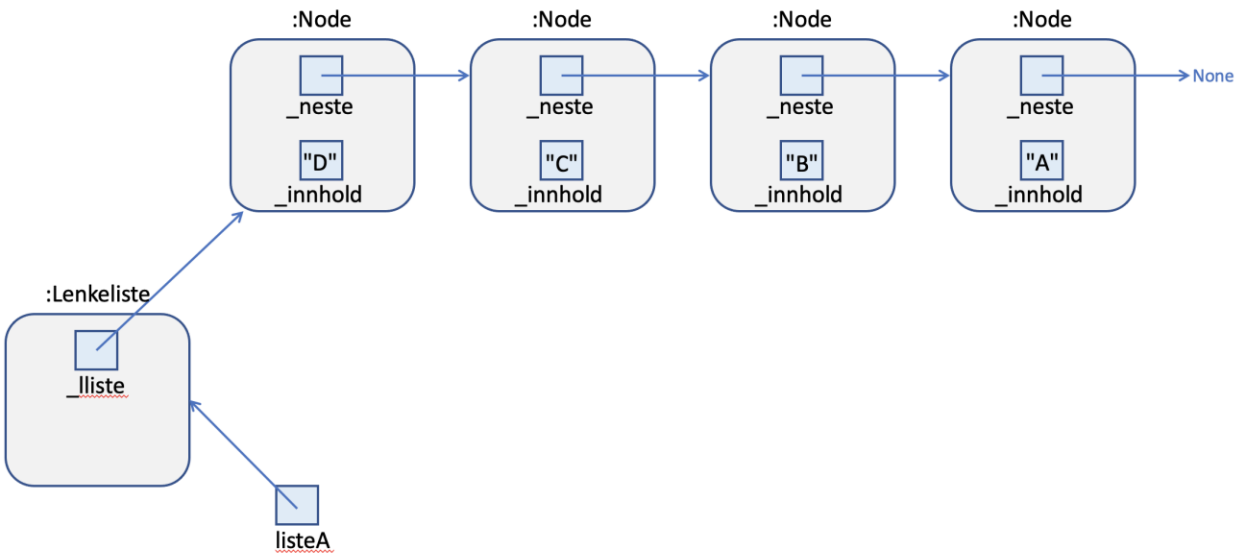


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```



```
20 n = liste
21 while n != None:
22     print(n._innhold)
23     n = n._neste
```





```

1 class Node :
2     def __init__(self, nytt) :
3         self._innhold = nytt
4         self._neste = None
5
6     def settNeste (self, ny) :
7         self._neste = ny
8
9     def neste (self) :
10        return self._neste
11
12    def hentData (self) :
13        return self._innhold
14

```

```

15 class Lenkeliste :
16     def __init__(self) :
17         self._lliste = None
18
19     def push(self, innhold):
20         ny = Node(innhold)
21         ny.settNeste(self._lliste)
22         self._lliste = ny
23
24     def pop(self):
25         ut = self._lliste.hentData()
26         self._lliste = self._lliste.neste()
27         return ut
28
29     def ikkeTom(self):
30         return self._lliste != None
31
32     listeA = Lenkeliste()
33     for tegn in 'ABCD':
34         listeA.push(tegn)
35
36     while listeA.ikkeTom():
37         print(listeA.pop())

```