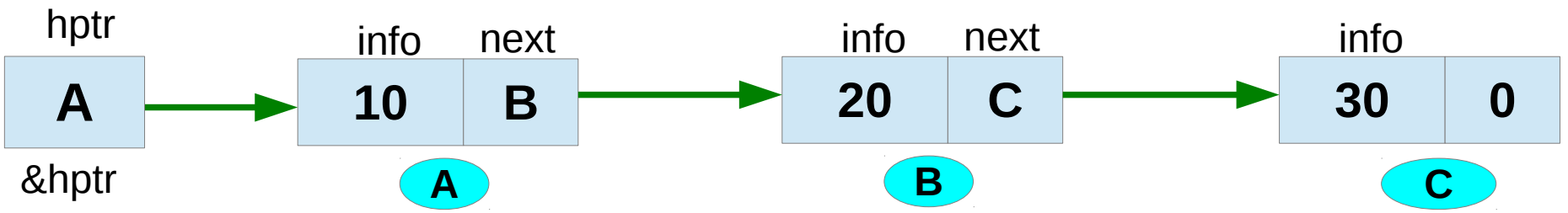
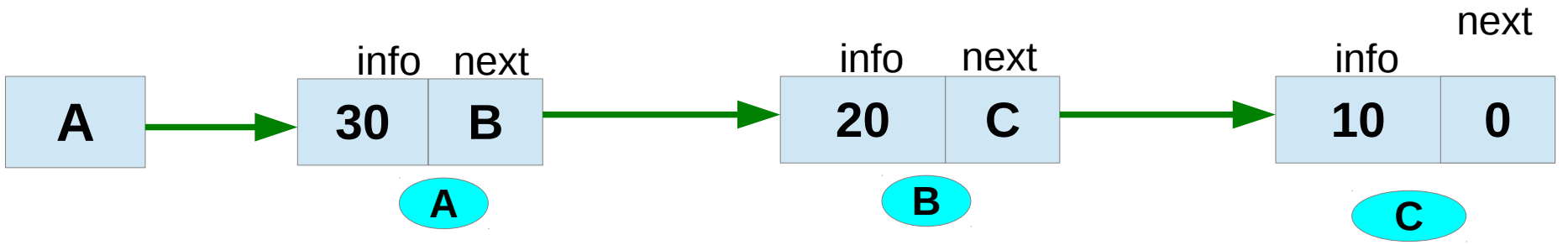
Reverse the linked list

2 methods

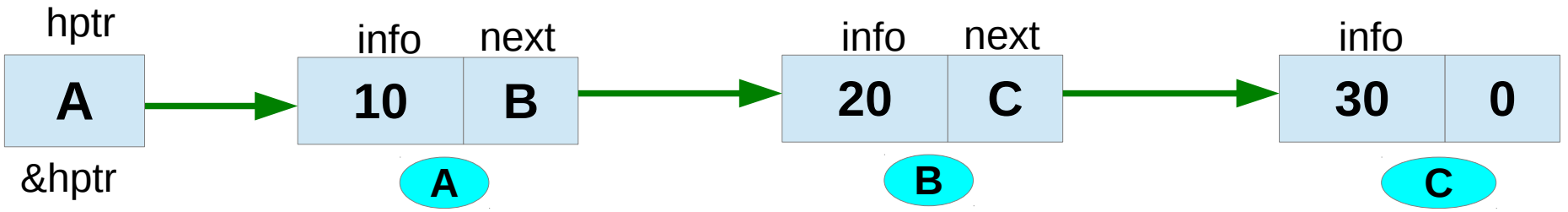
- Reverse the data
- Reverse the Link

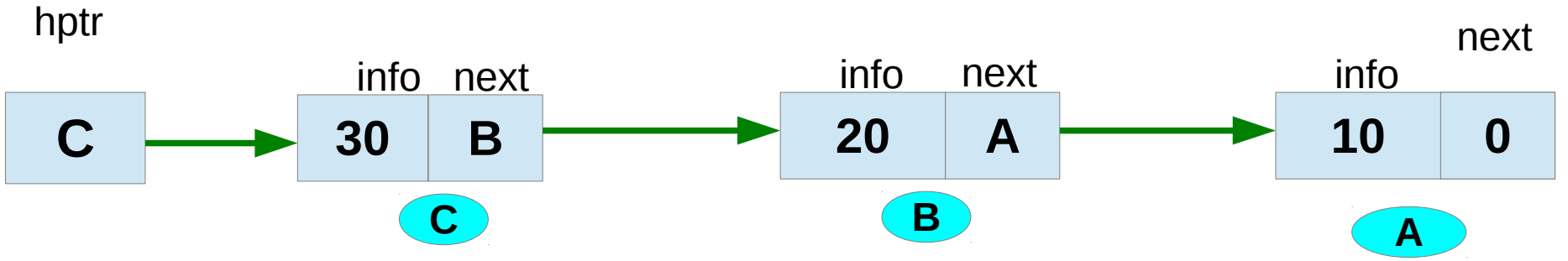
Reverse the data





Reverse the Link



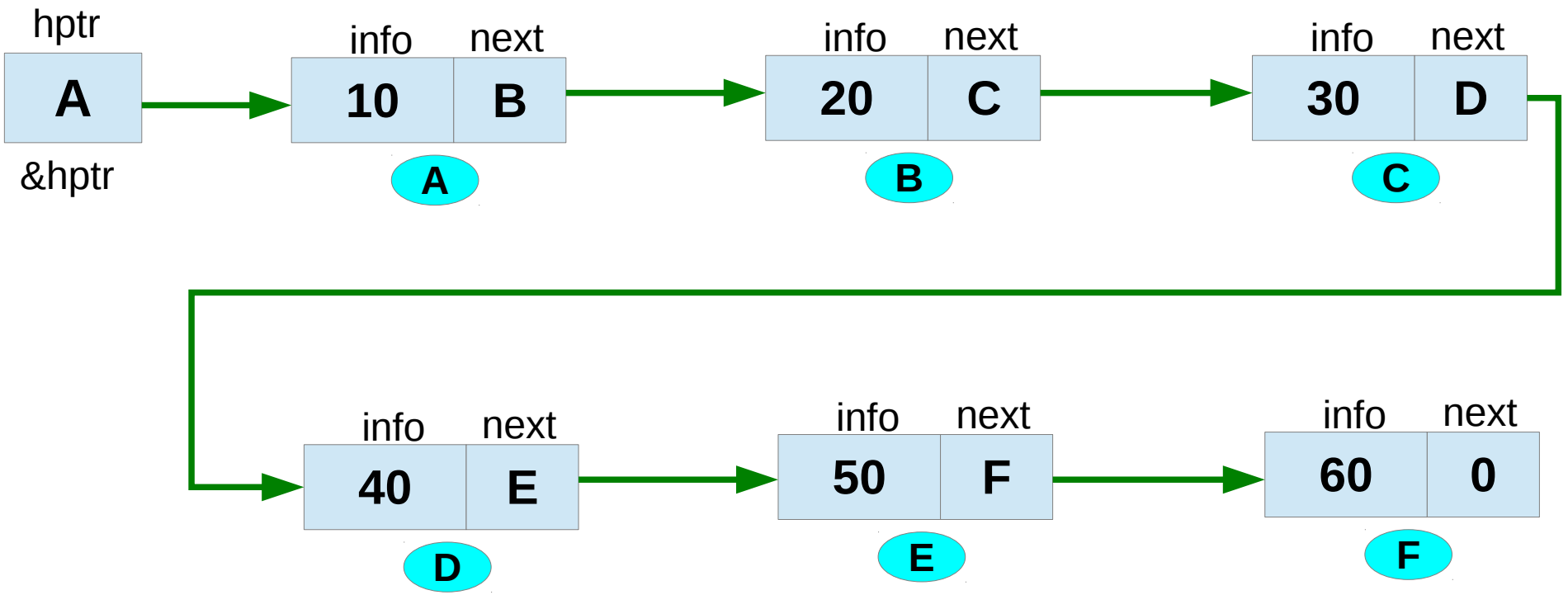


rev_data

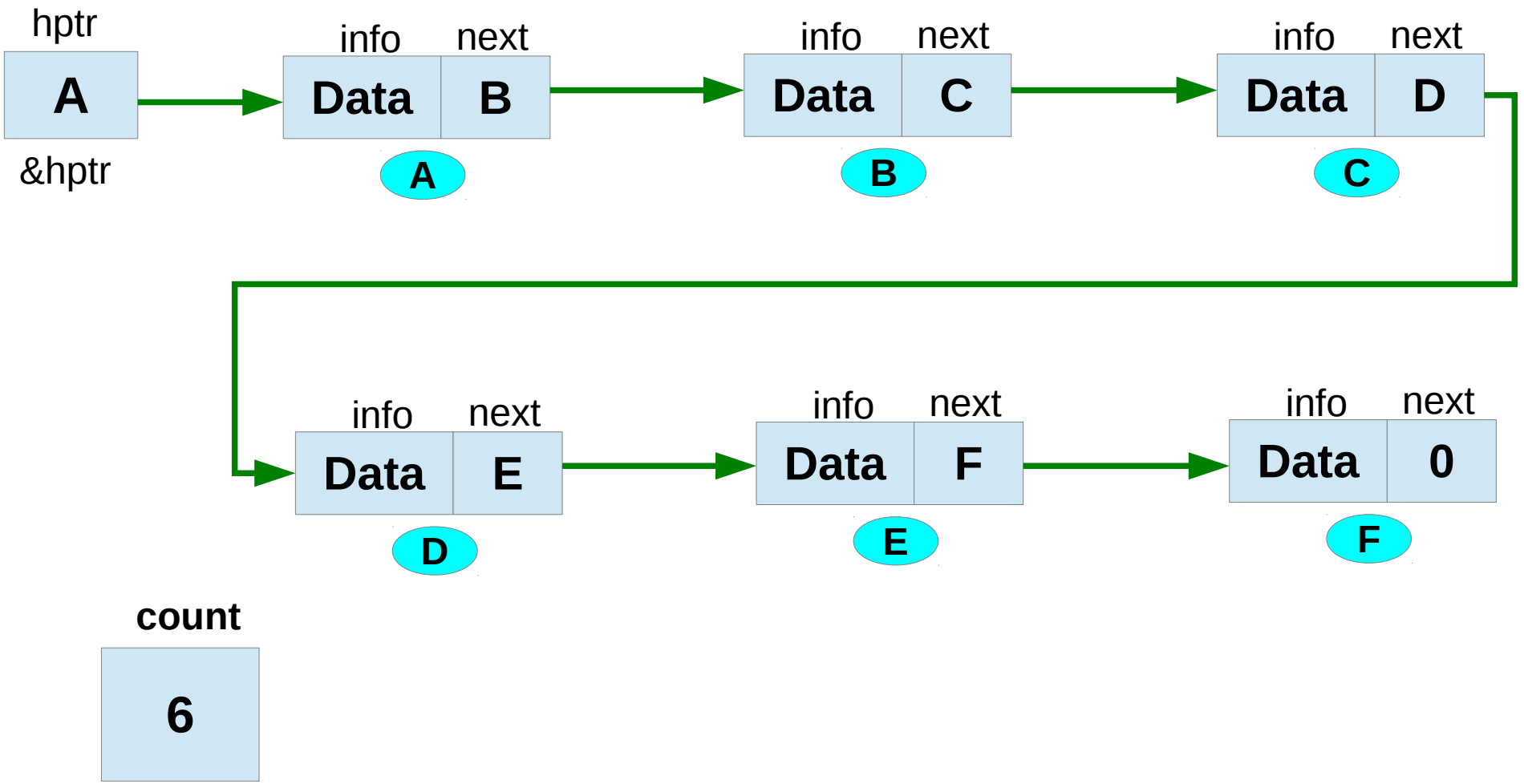
Method 1 :

1. Take 2 pointers like P1 & P2.
2. Make P1 points to first node, P2 points to last Node and swap the data.
3. Now increment P1 to point to second node & decrement P2 to point to second last node and swap the data.
4. Same way increment P1 to next node, decrement P2 to the previous node and keep on swap the data untill half of no.of nodes count

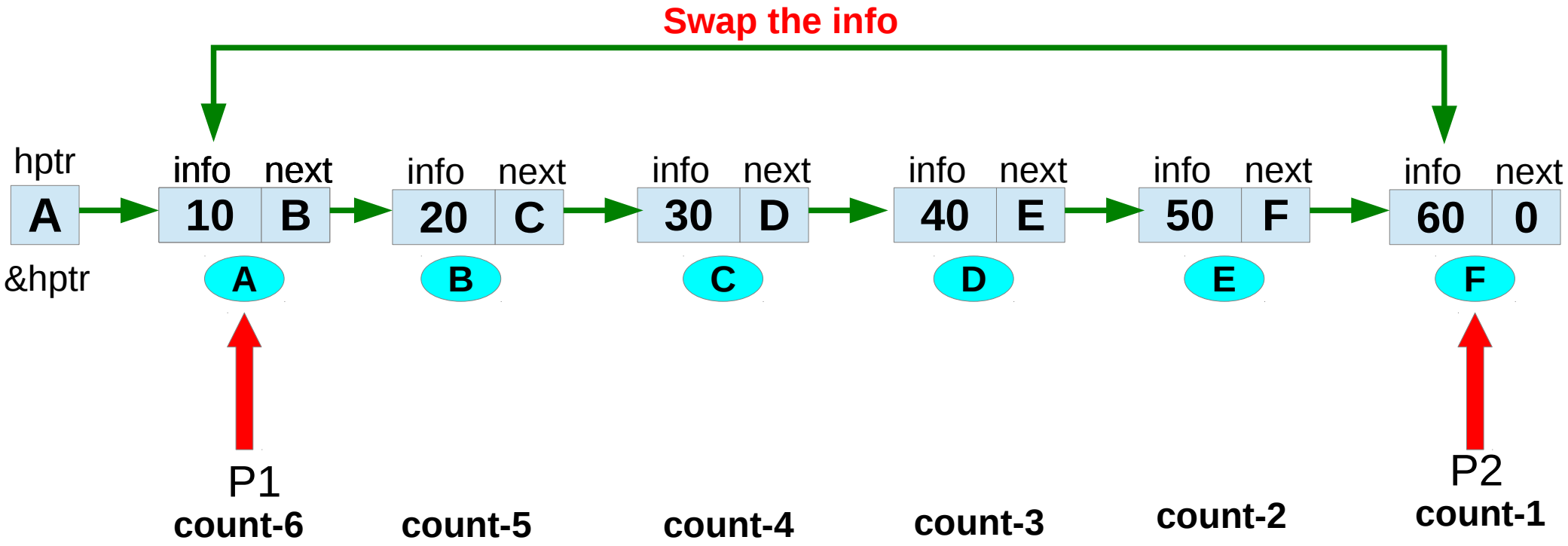
rev_data


hptr
A
&hptr
info
next
10
B
A
info
next
20
C
B
info
next
30
D
C
info
next
40
E
D
info
next
50
F
E
info
next
60
0
F

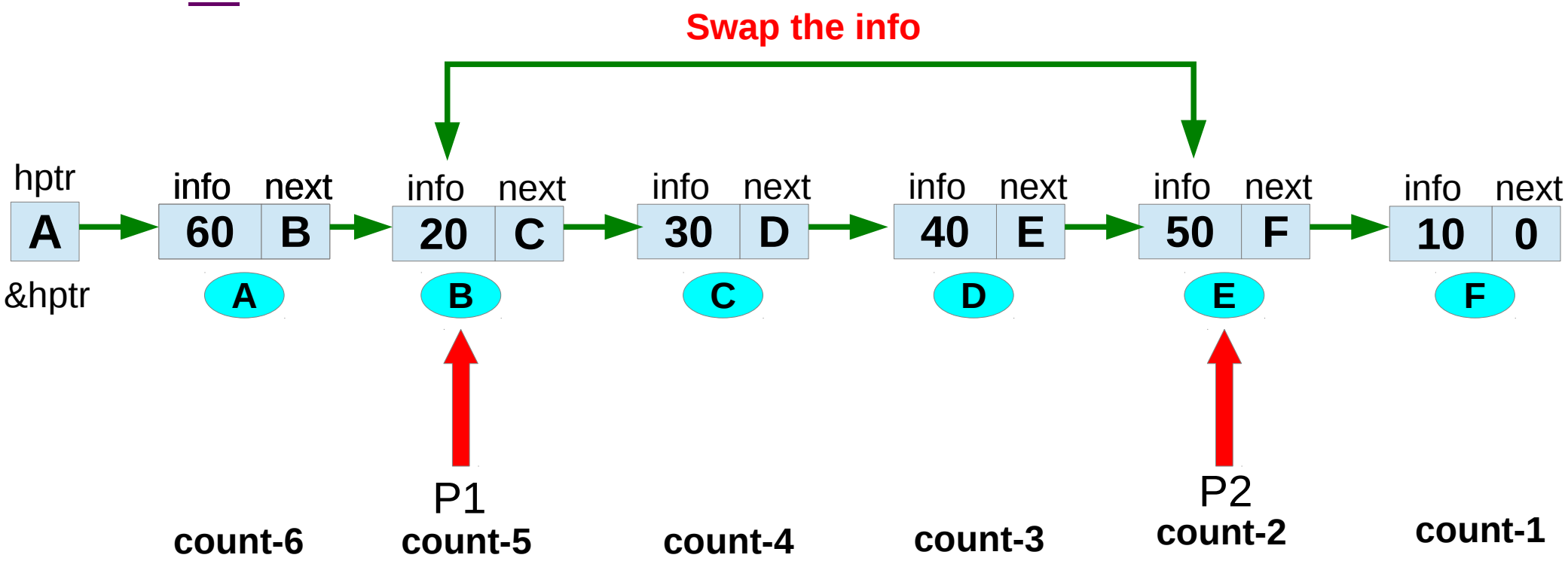
rev_data


hptr
A
&hptr
info
next
Data
B
A
info
next
Data
C
B
info
next
Data
D
C
info
next
Data
E
D
info
next
Data
F
E
info
next
Data
0
F
count
6

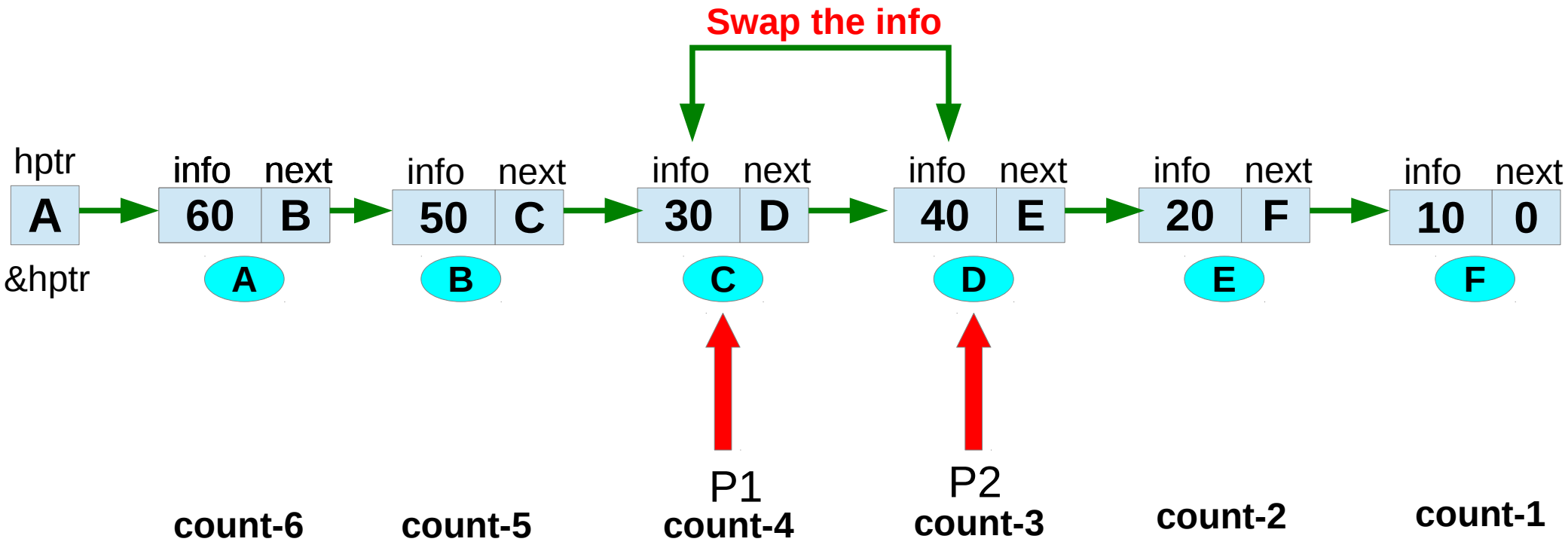
rev_data


Swap the info
hptr
A
&hptr
info
next
10
B
20
C
30
D
40
E
50
F
60
0
A
B
C
D
E
F
P1
P2
count-6
count-5
count-4
count-3
count-2
count-1

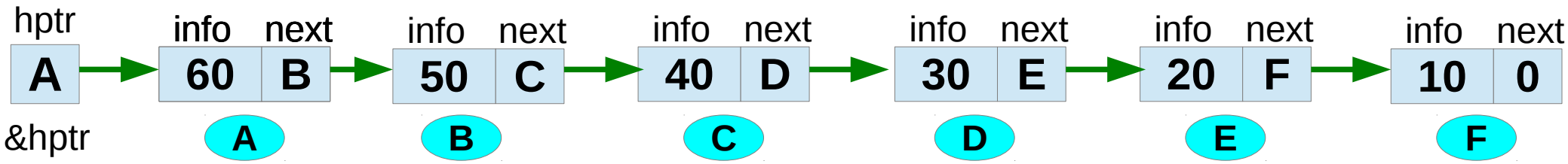
rev_data


Swap the info
hptr
A
&hptr
info
next
60
B
A
20
C
B
30
D
C
40
E
D
50
F
E
10
0
F
P1
P2
count-6
count-5
count-4
count-3
count-2
count-1

rev_data


Swap the info
hptr
A
&hptr
info
next
60
B
A
info
next
50
C
B
info
next
30
D
C
info
next
40
E
D
info
next
20
F
E
info
next
10
0
F
P1
P2
count-6
count-5
count-4
count-3
count-2
count-1

rev_data



P1

P2

count-6 **count-5** **count-4** **count-3** **count-2** **count-1**