

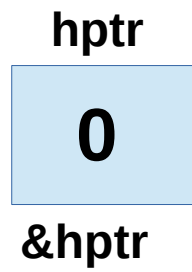
add_middle

There are 3 cases in this method

1. Insertion of a node may add at the begin (hptr)
2. Insertion of a node may add at the end (last->next)
3. Insertion of a node may add at the middle

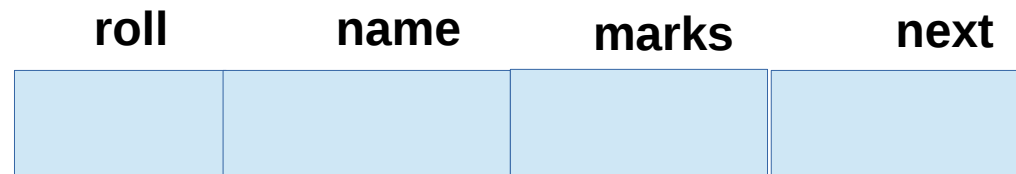
If you enter 1st student record

add_begin



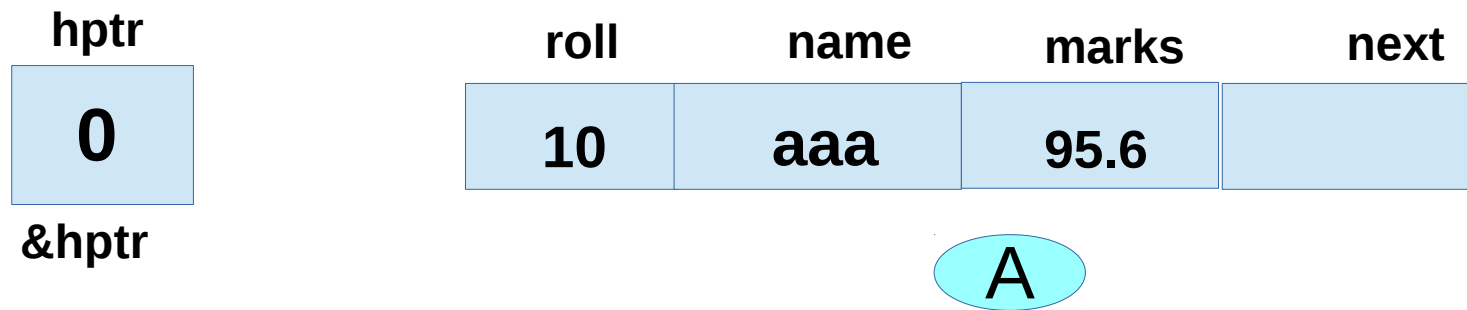
add_begin

hptr
0
&hptr

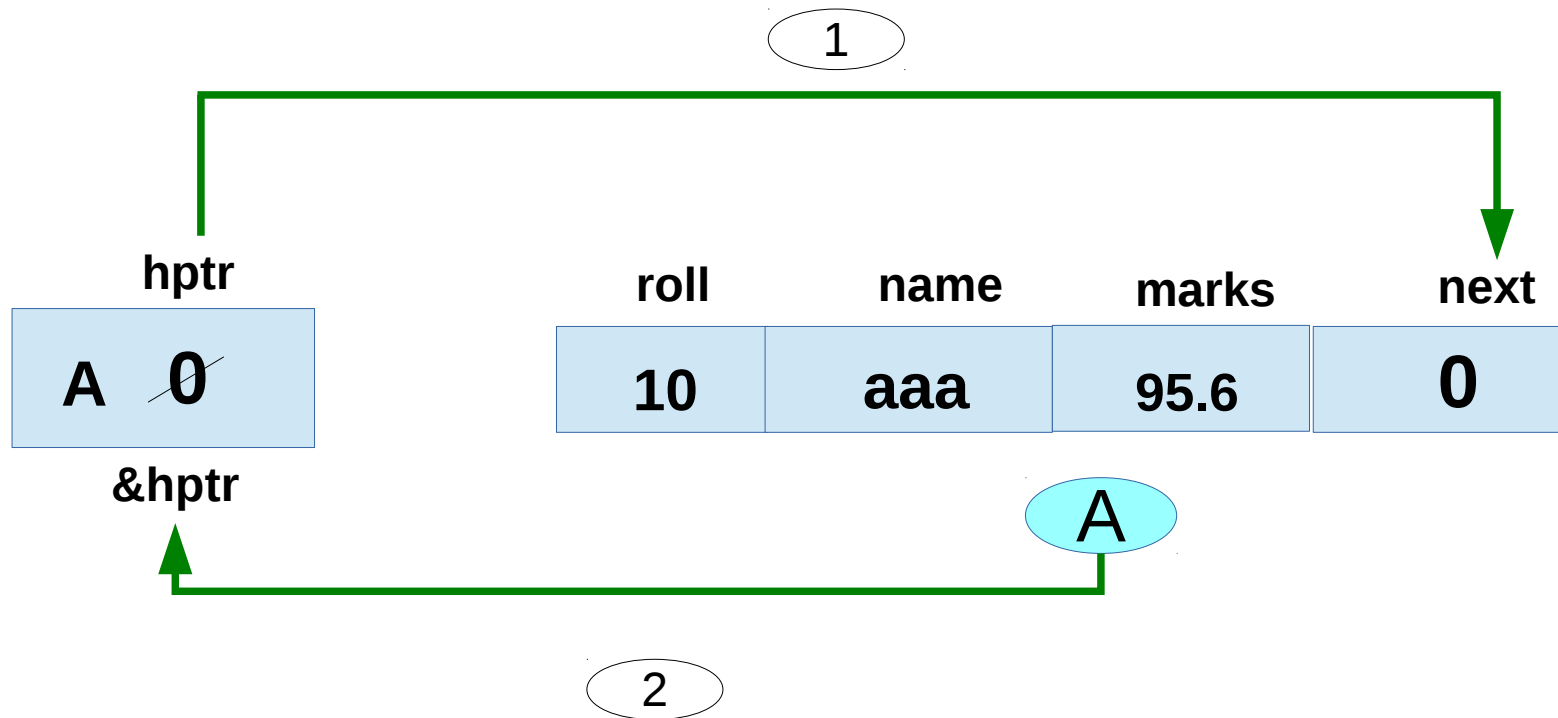


A

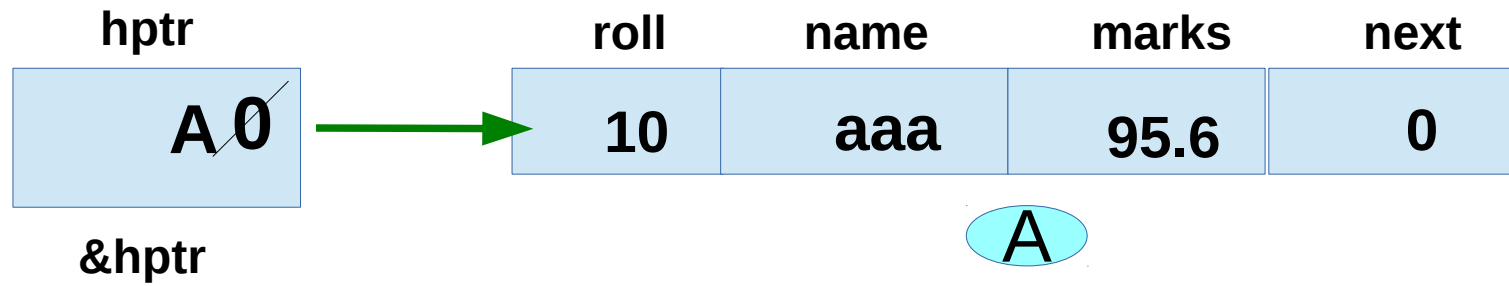
add_begin



add_begin

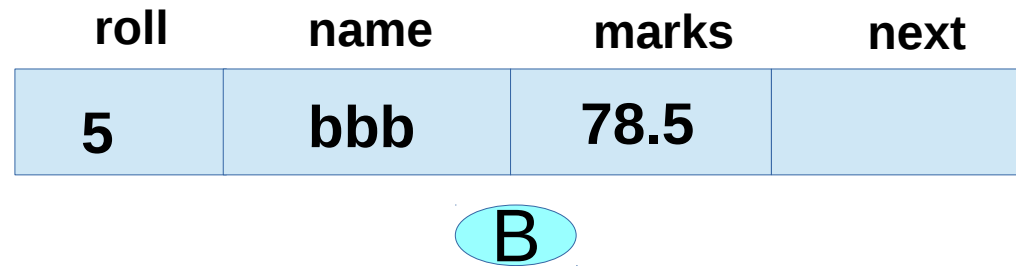
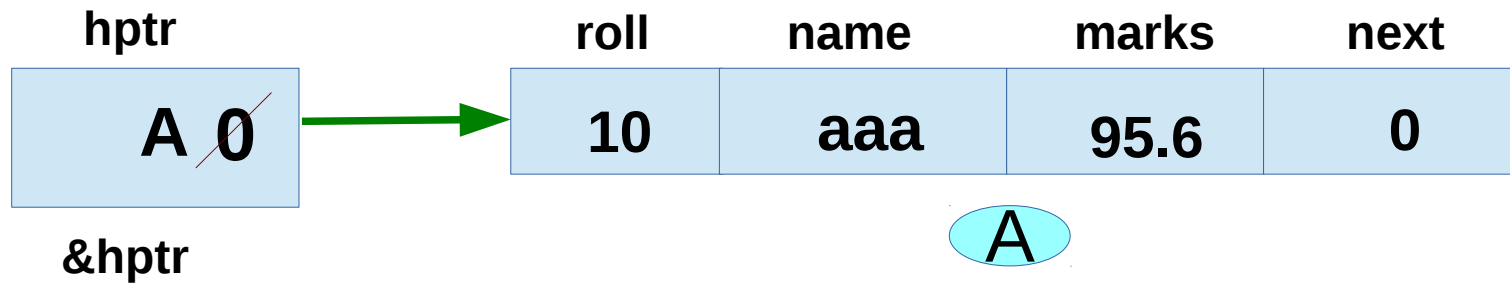


add_begin

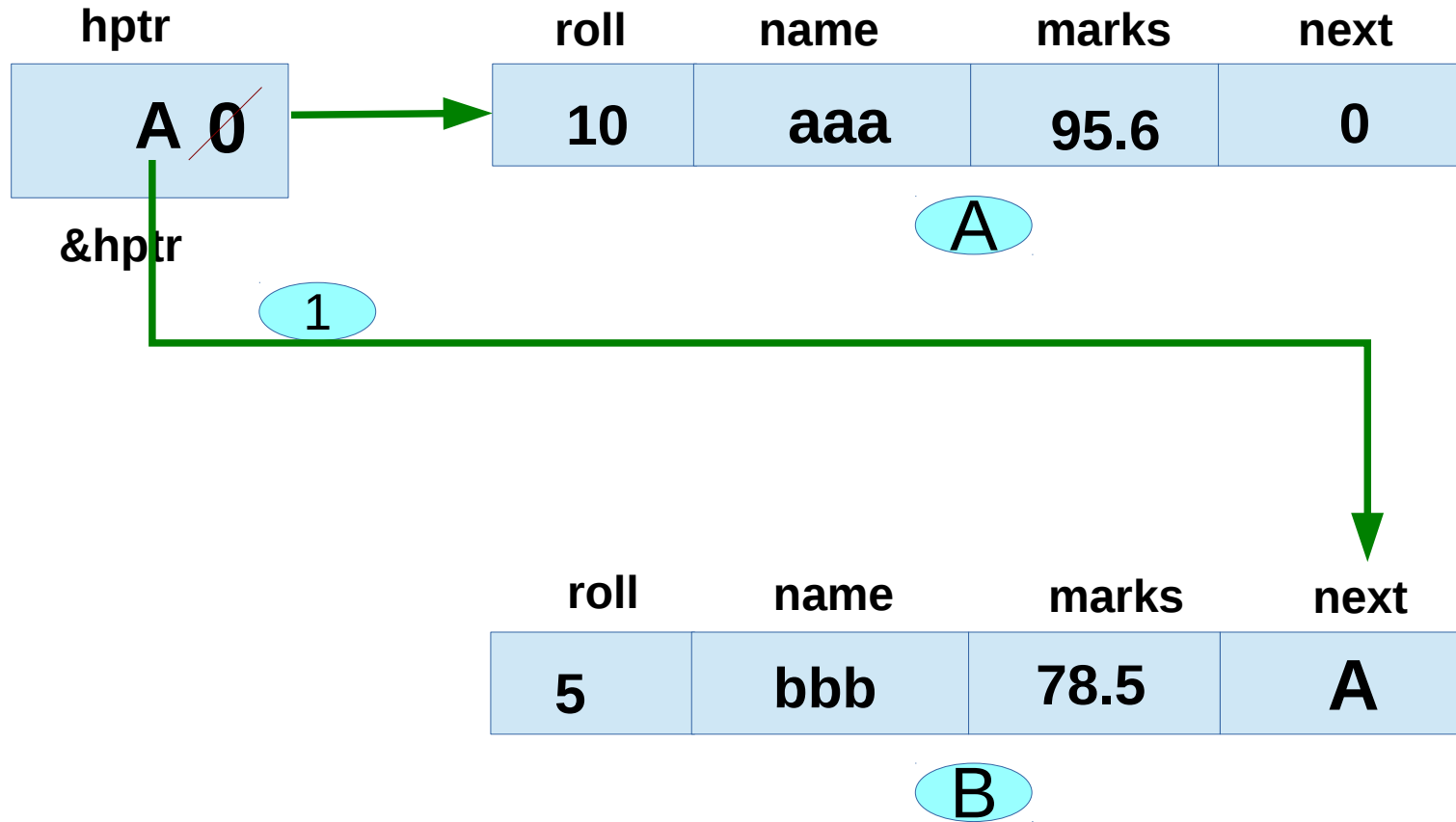


If you enter 2nd student record, and if that record roll number is smaller than the first record

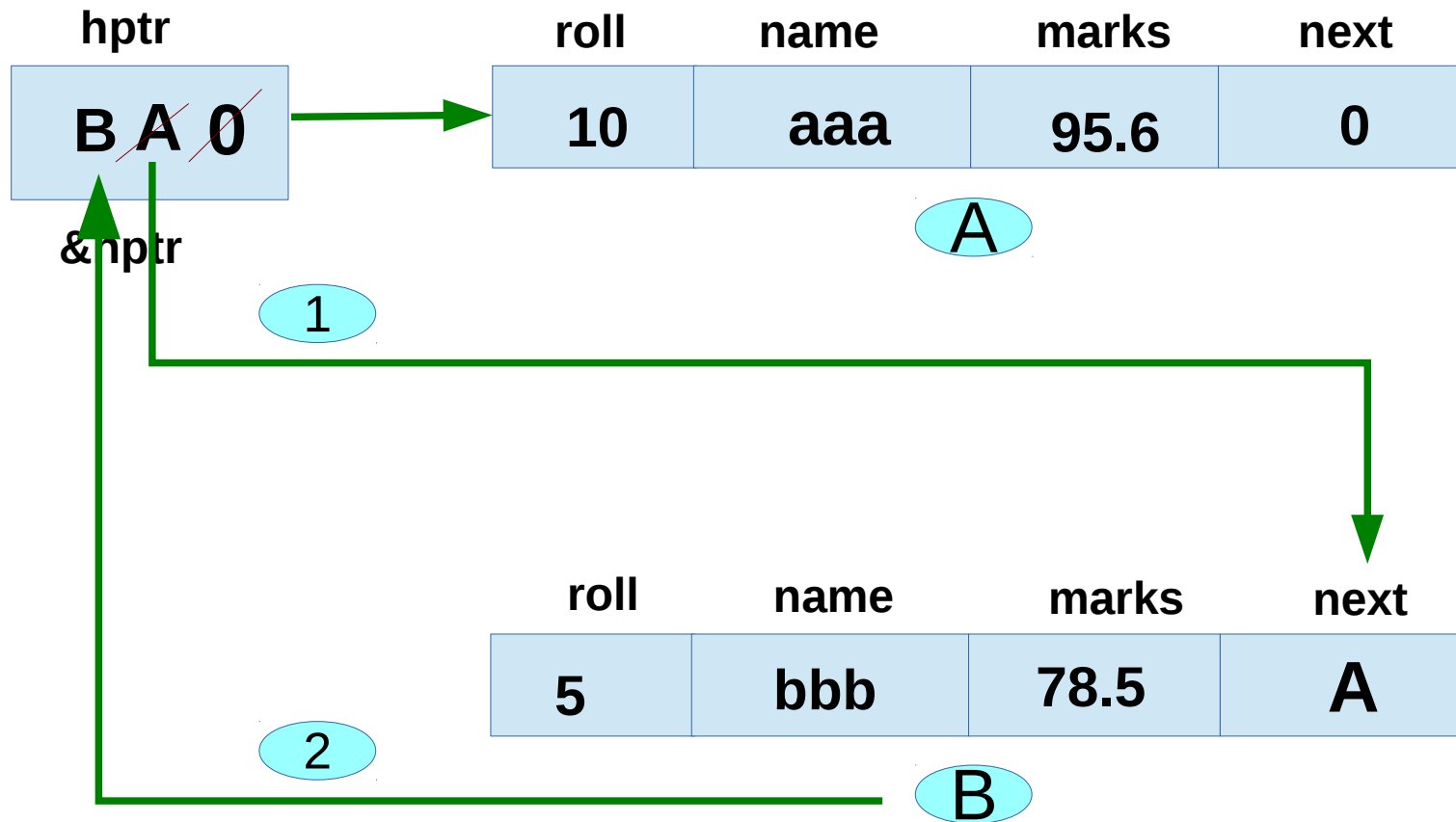
add_begin



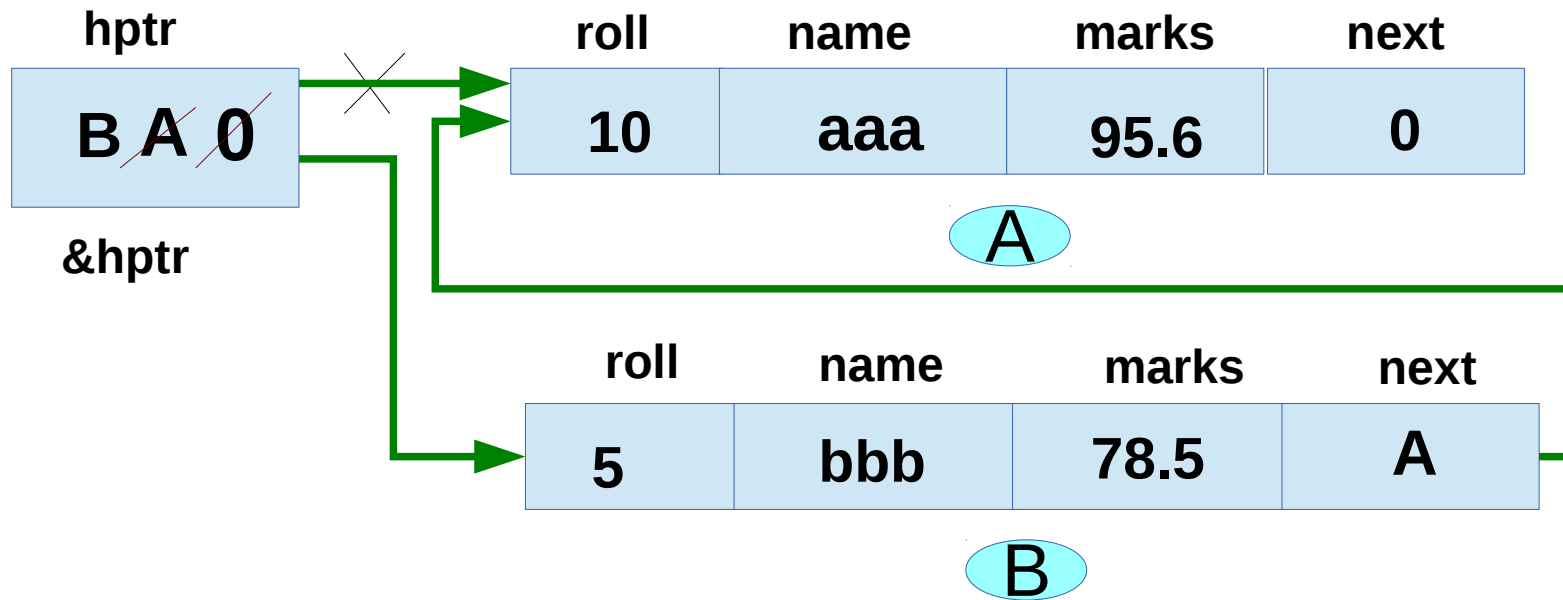
add_begin



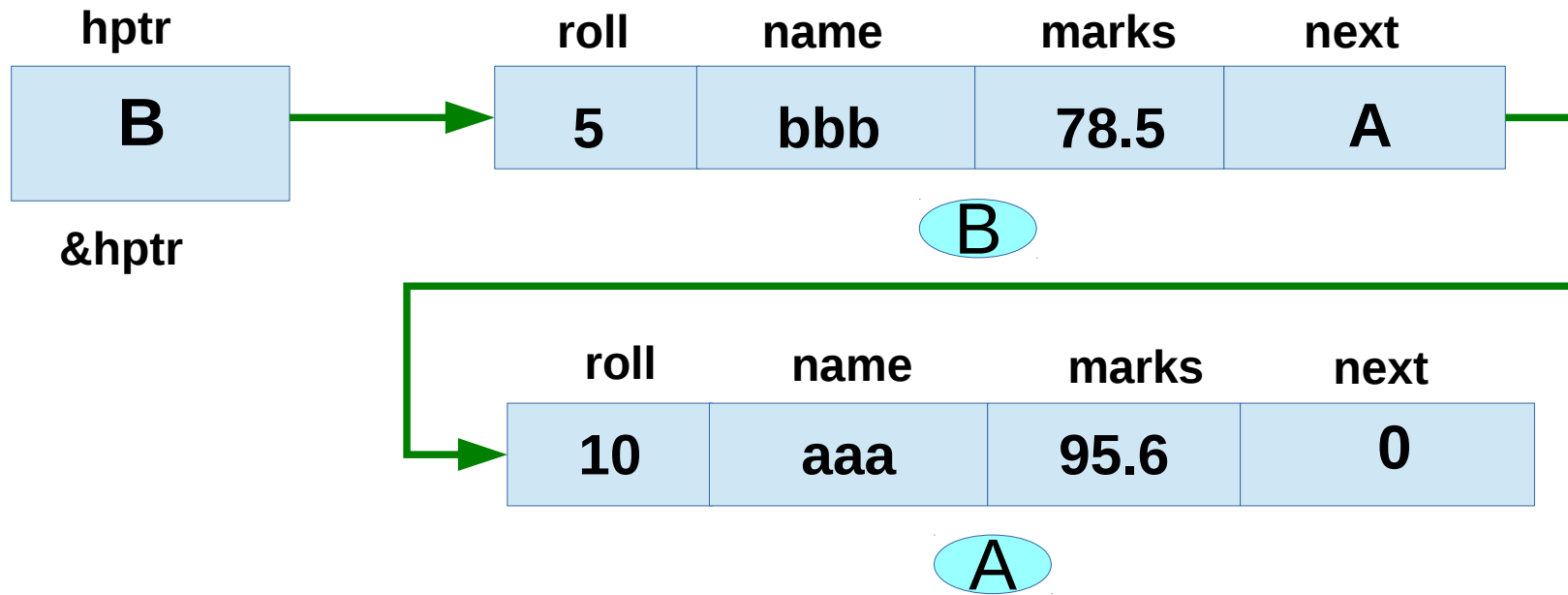
add_begin



add_begin

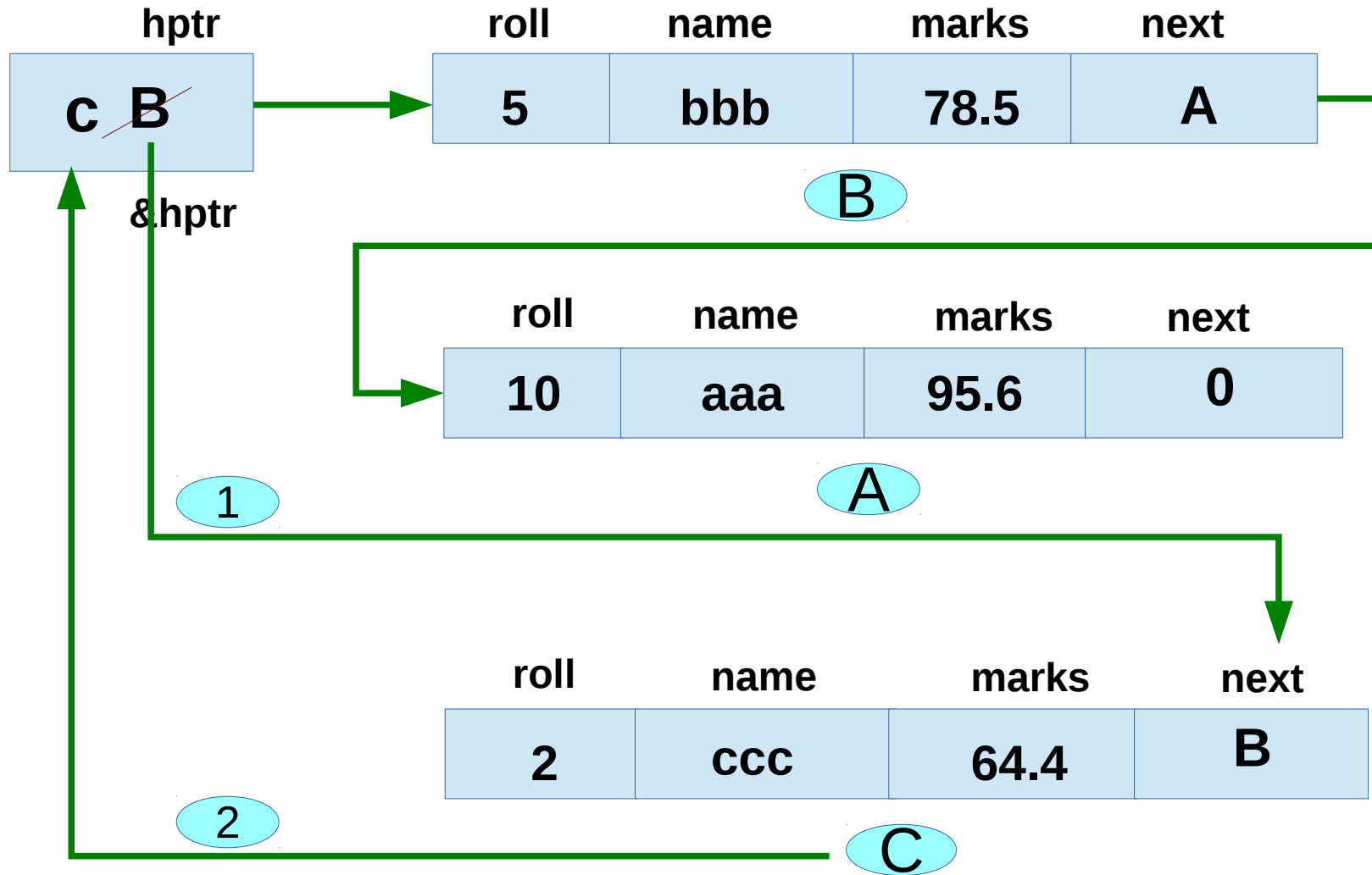


add_middle

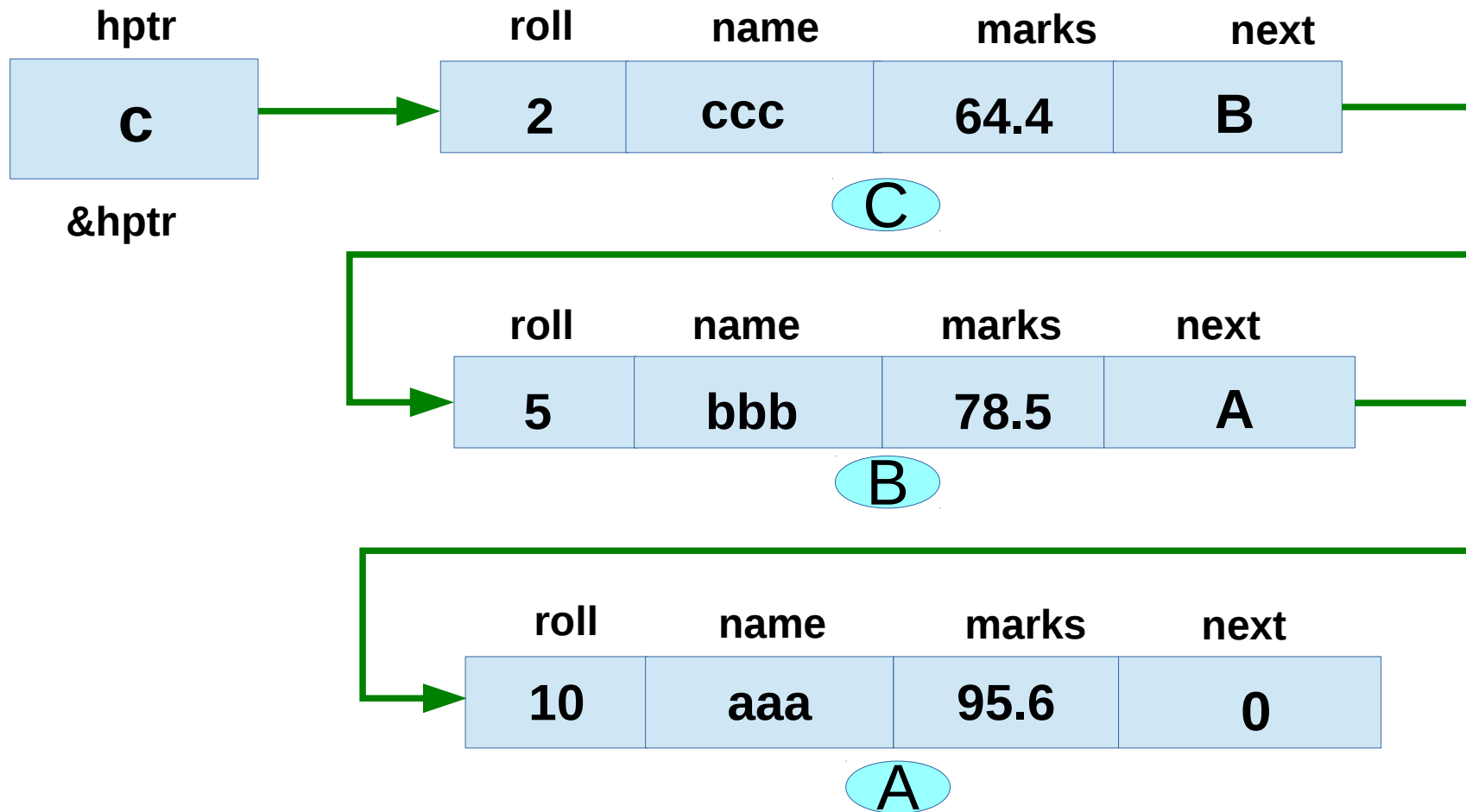


If you enter 3rd student record, even that is also smaller roll number when compared with the existing nodes

add_middle

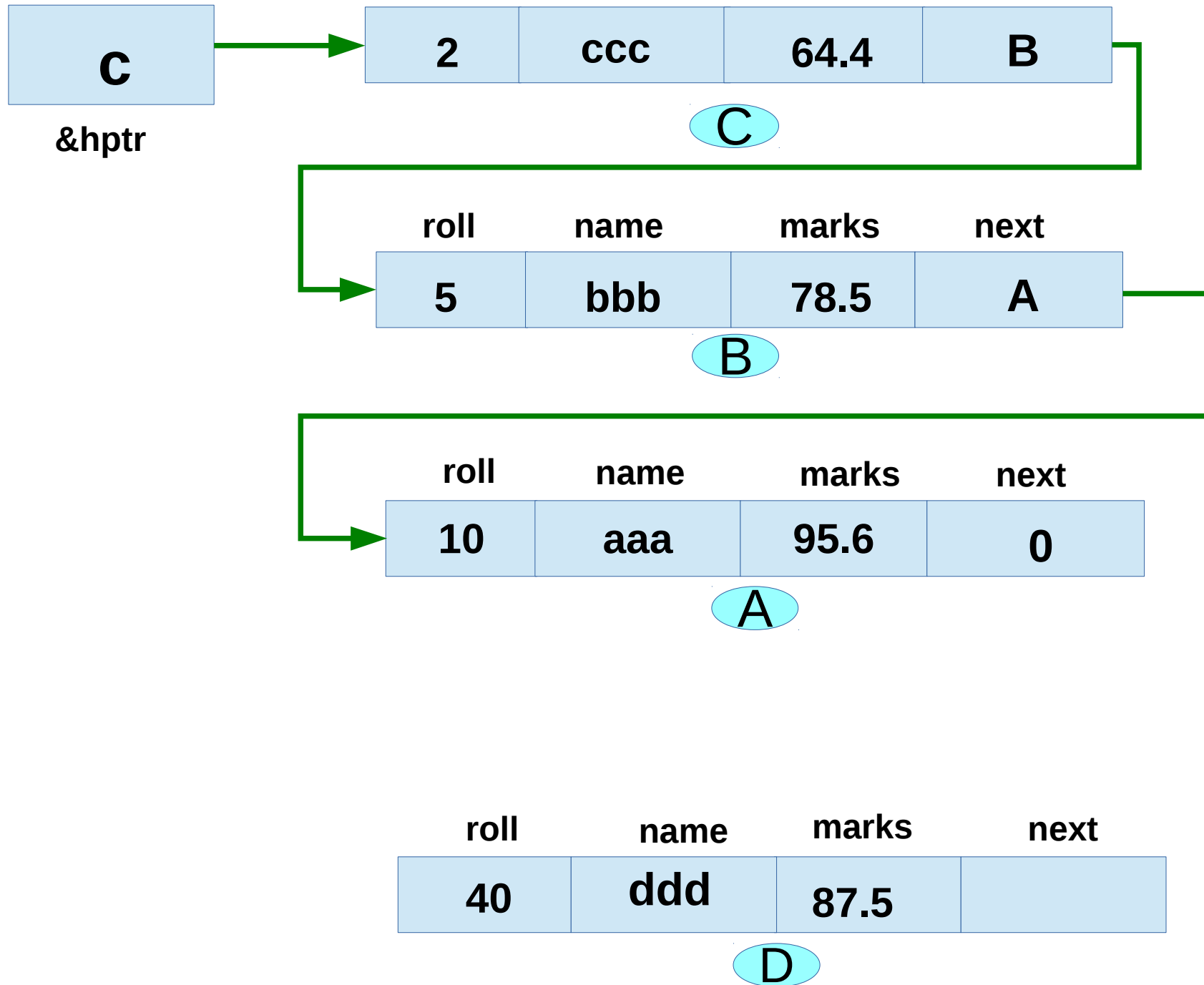


add_middle

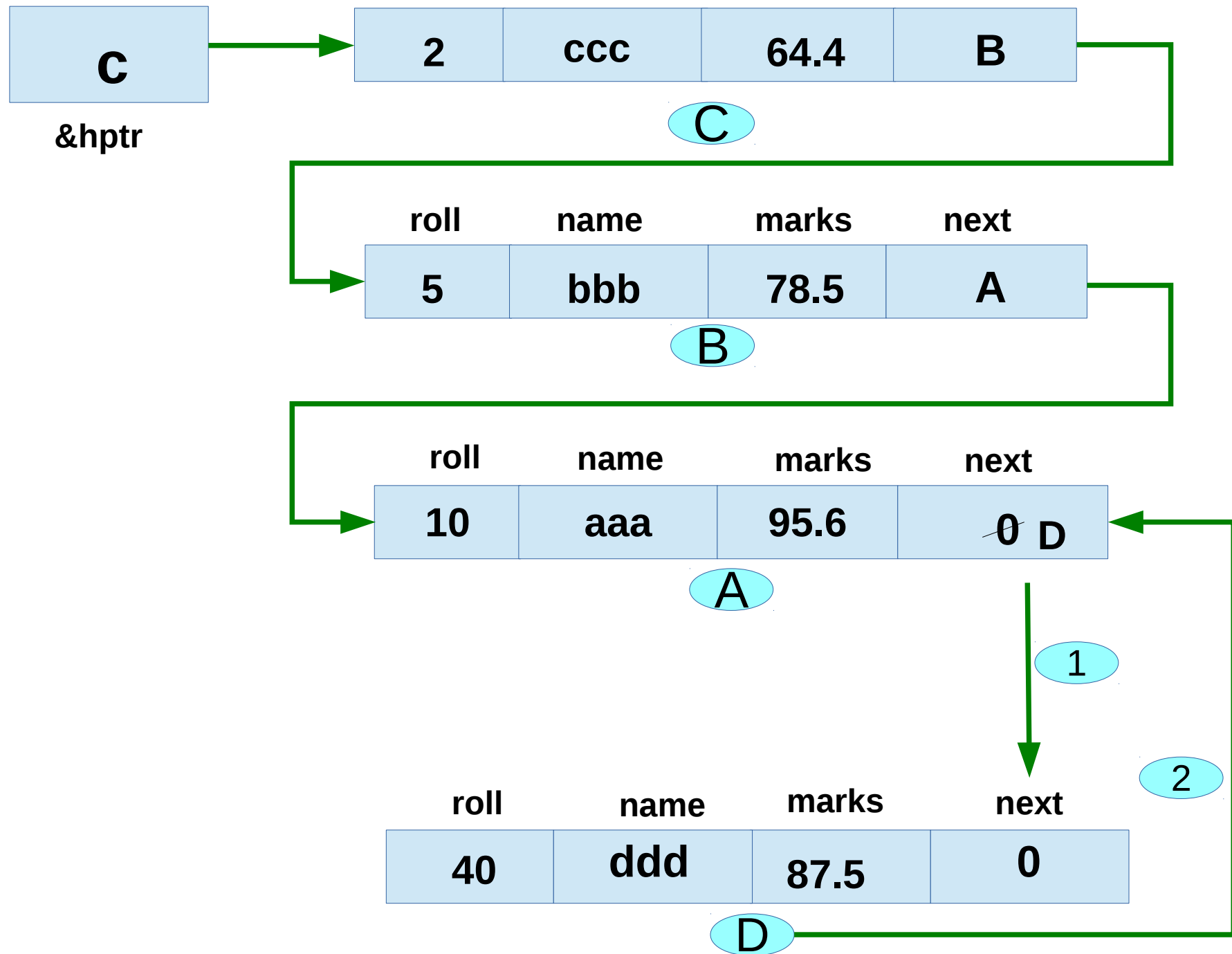


Now if you enter the records which are having greater roll number compared with the all other records roll number

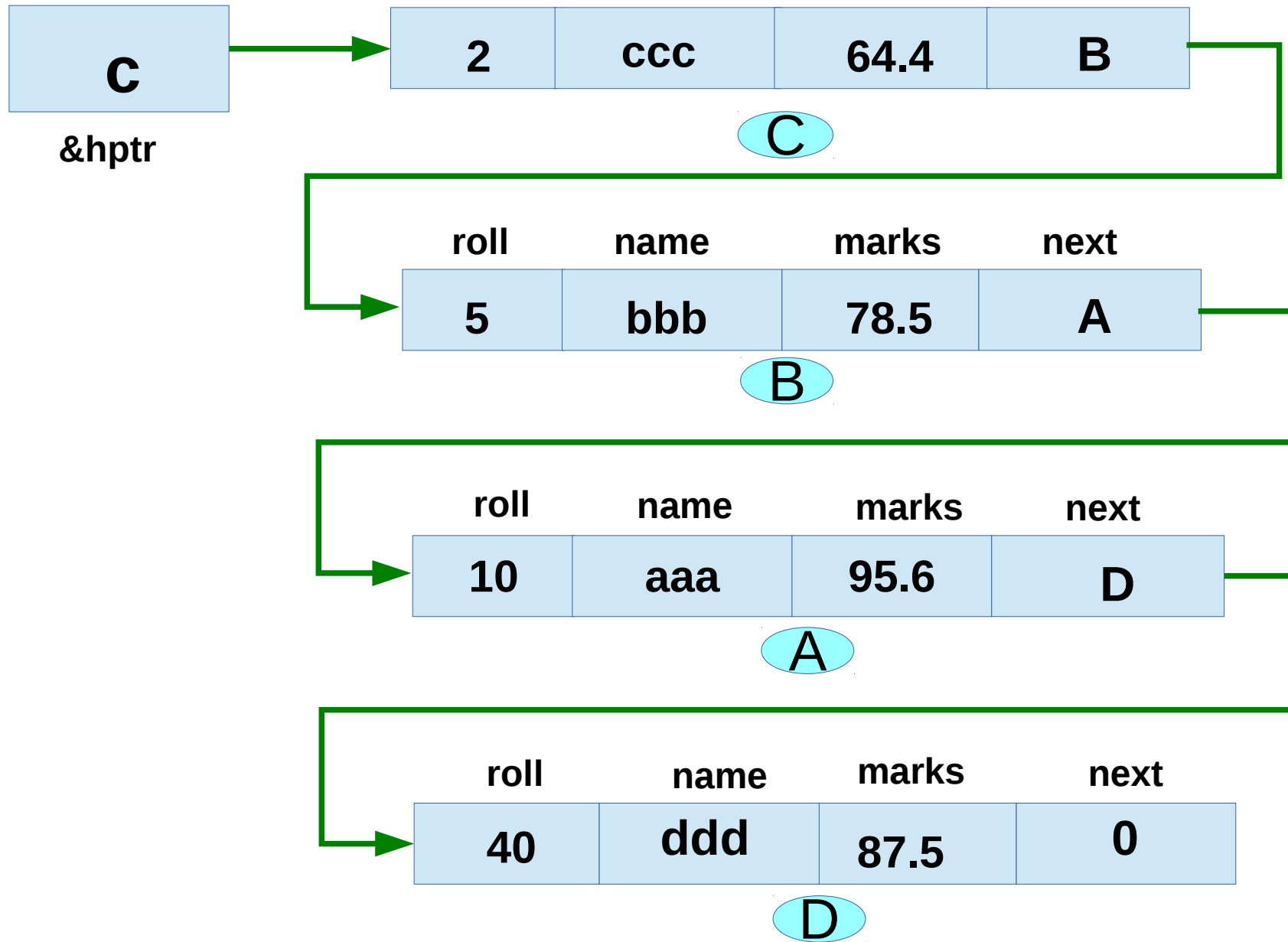
add_middle



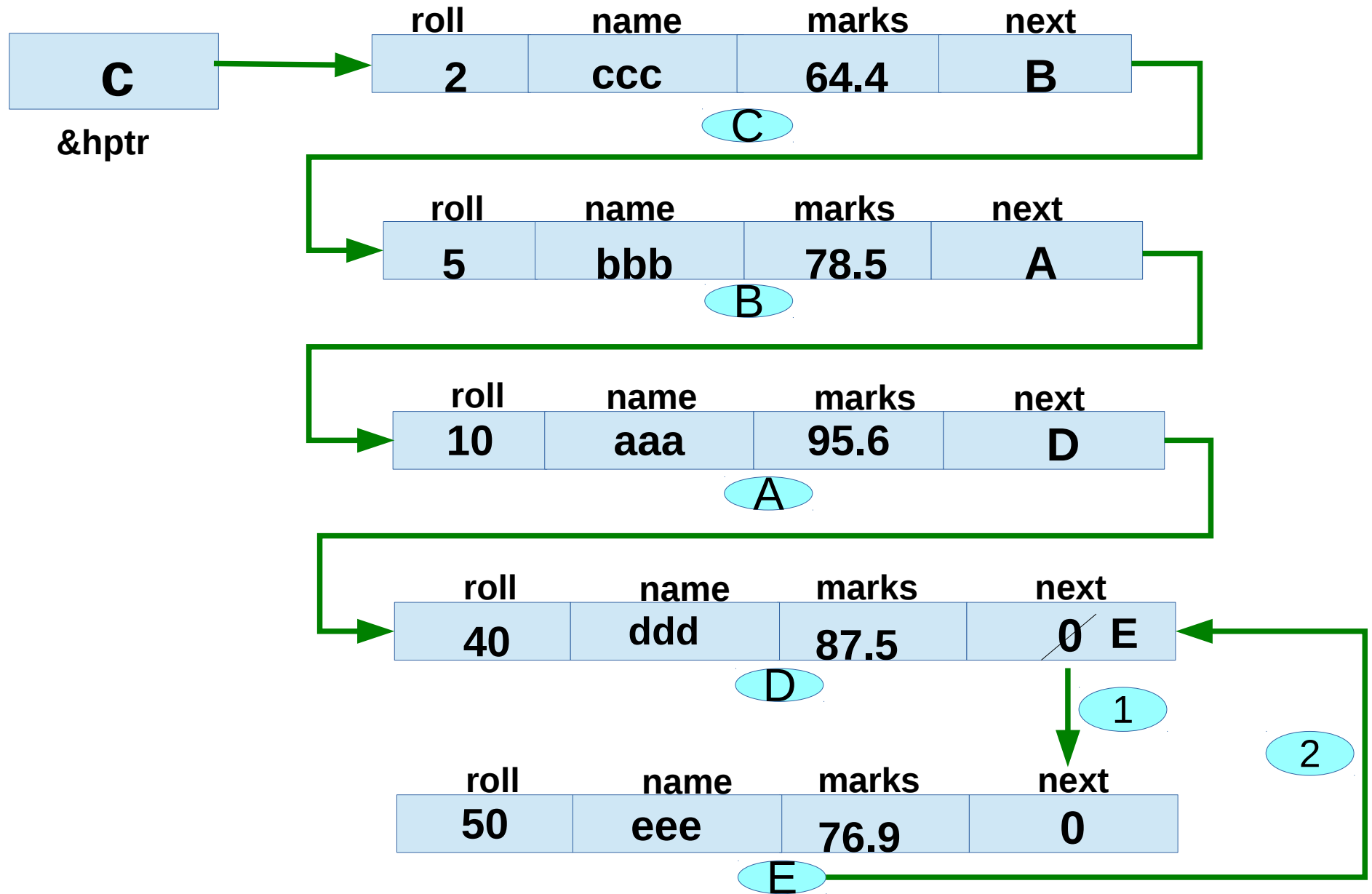
add_middle



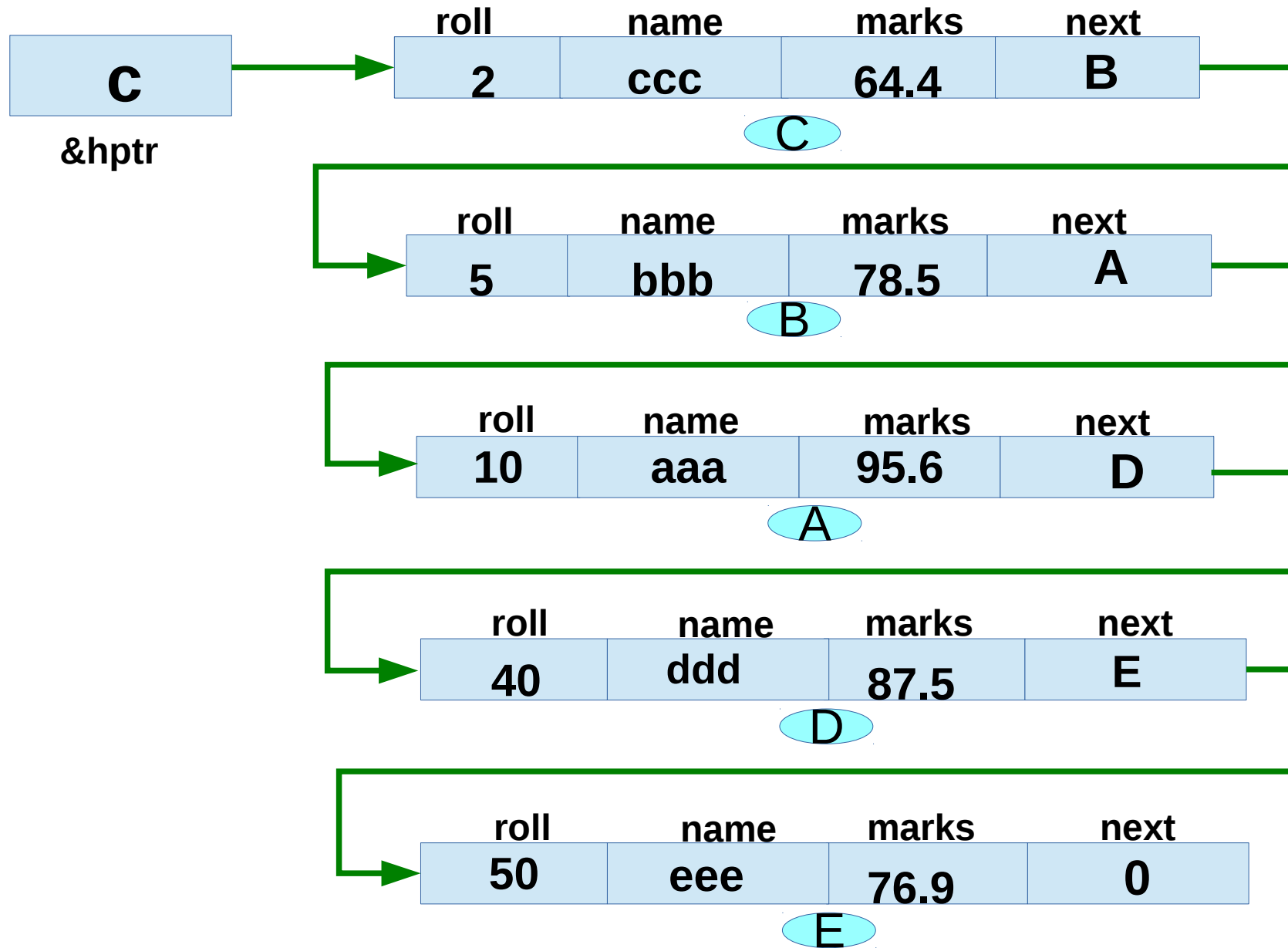
add_middle



add_middle

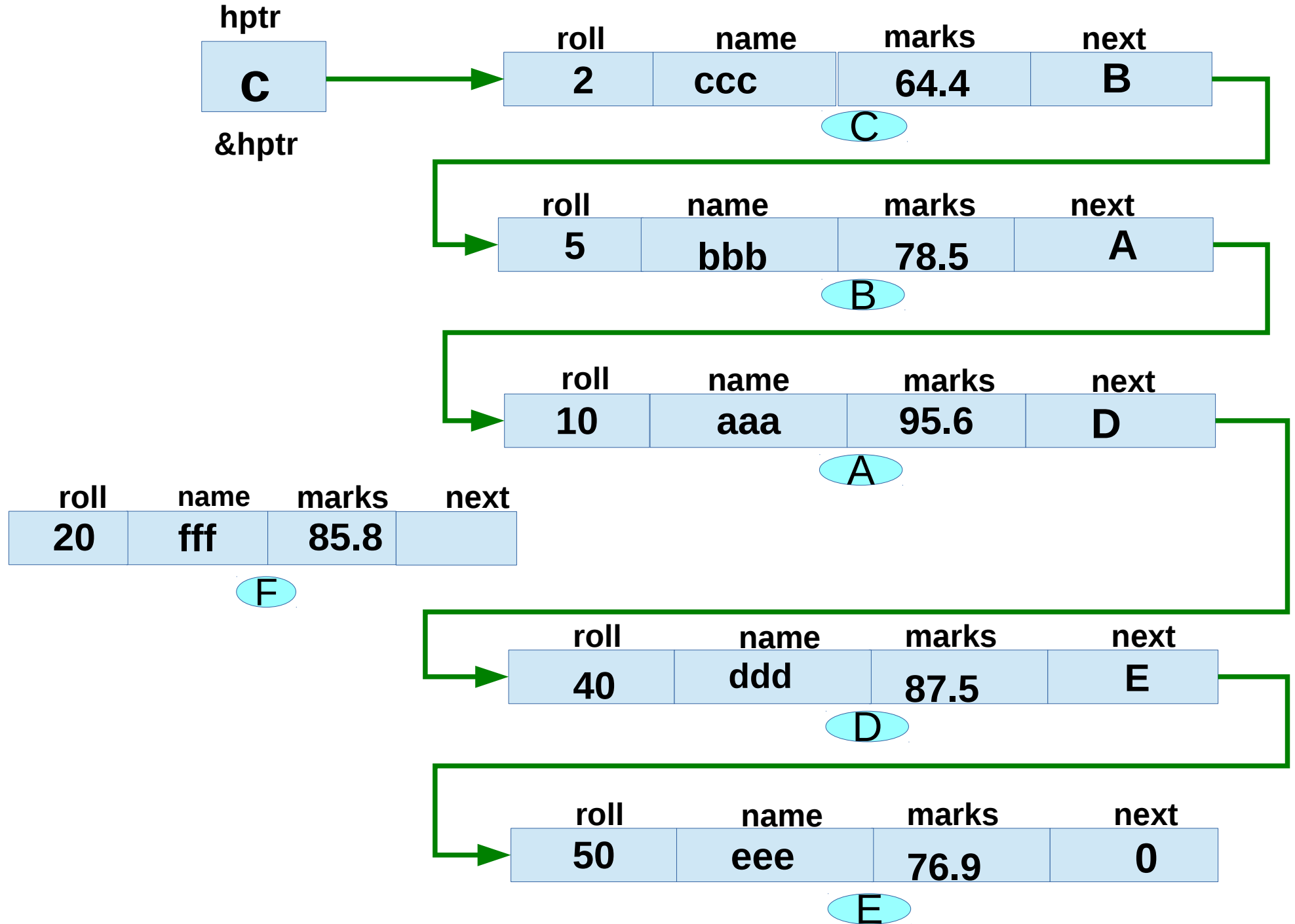


add_middle

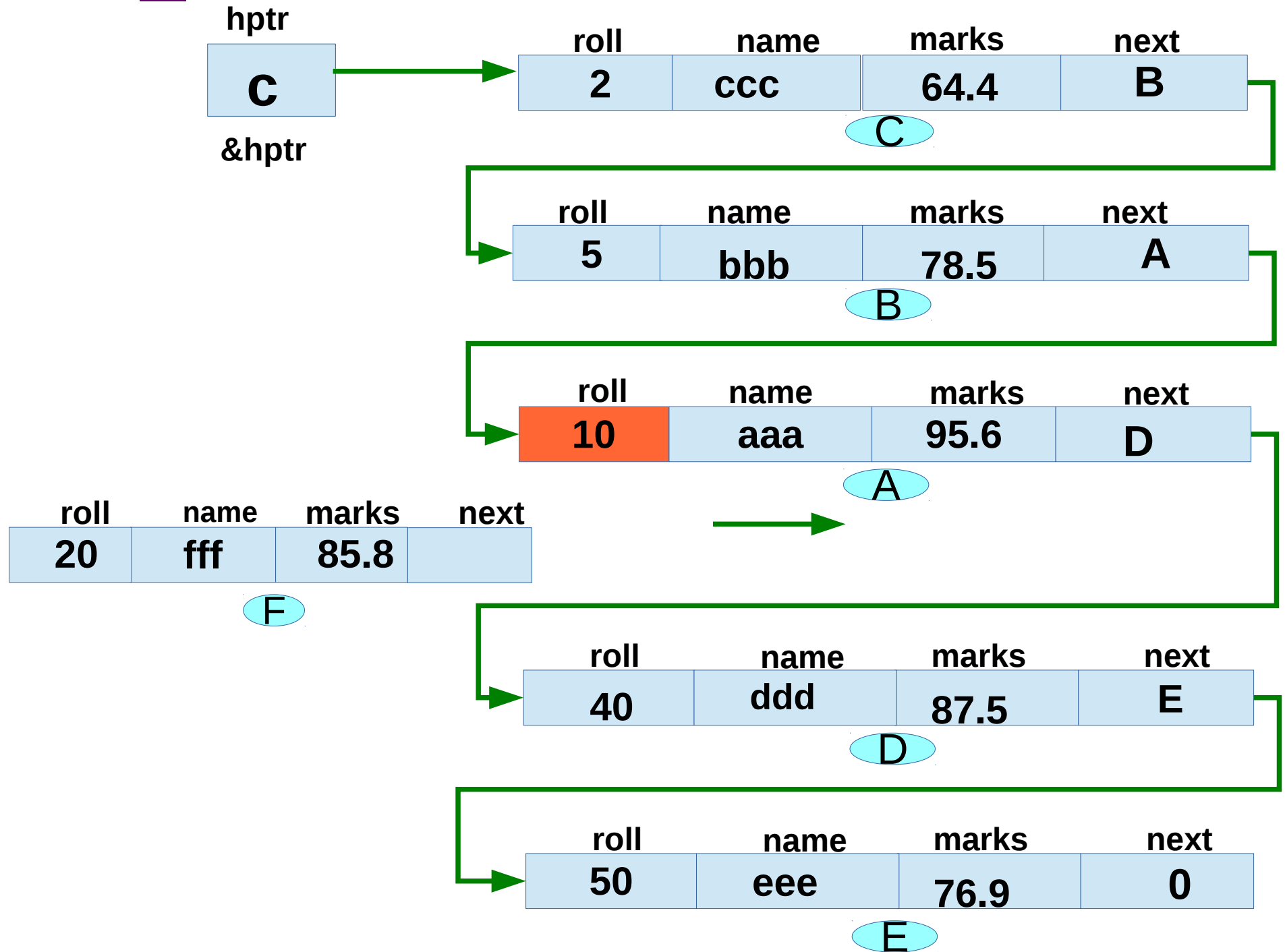


Now if the node has to be add at the middle

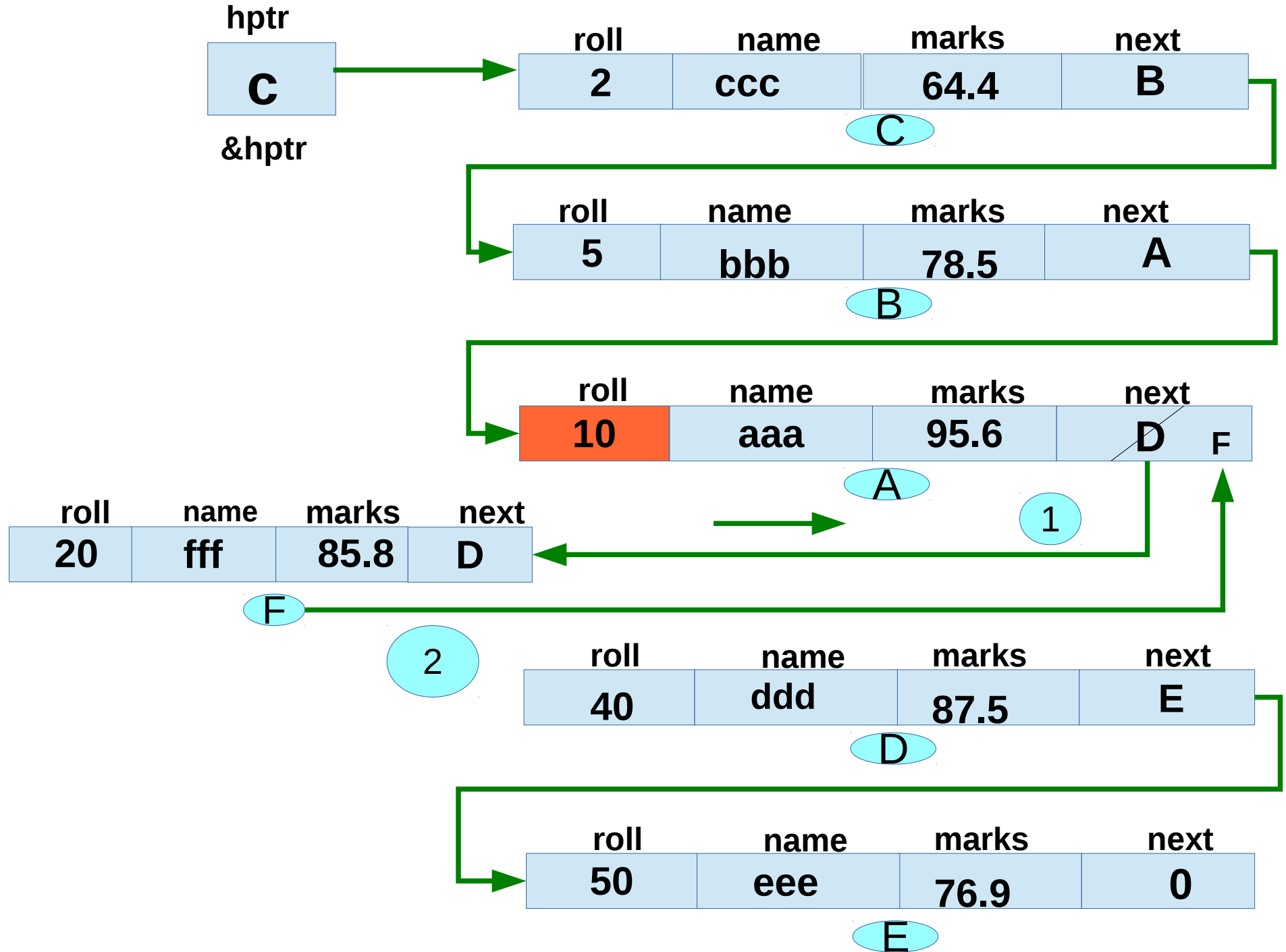
add_middle



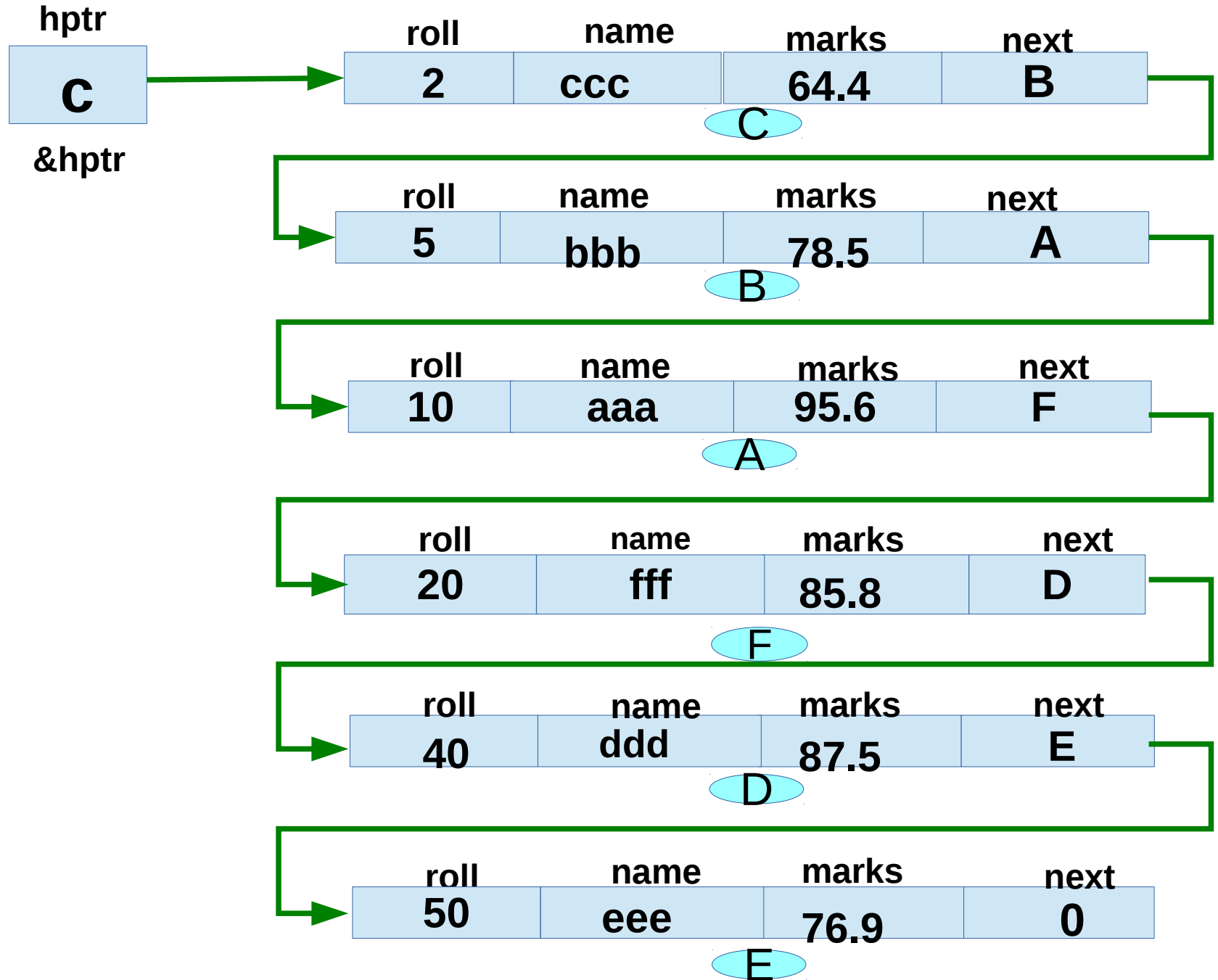
add_middle



add_middle

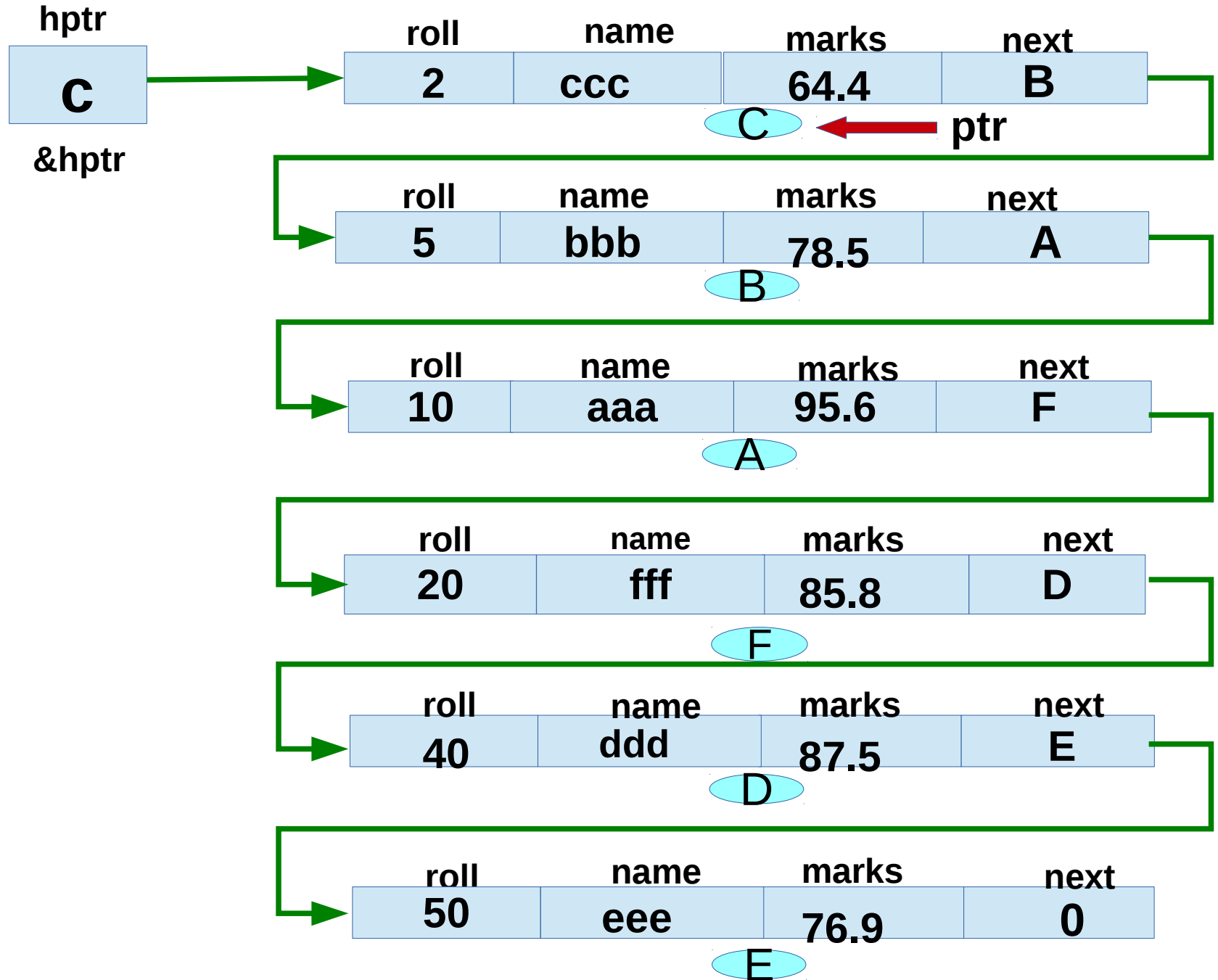


add_middle

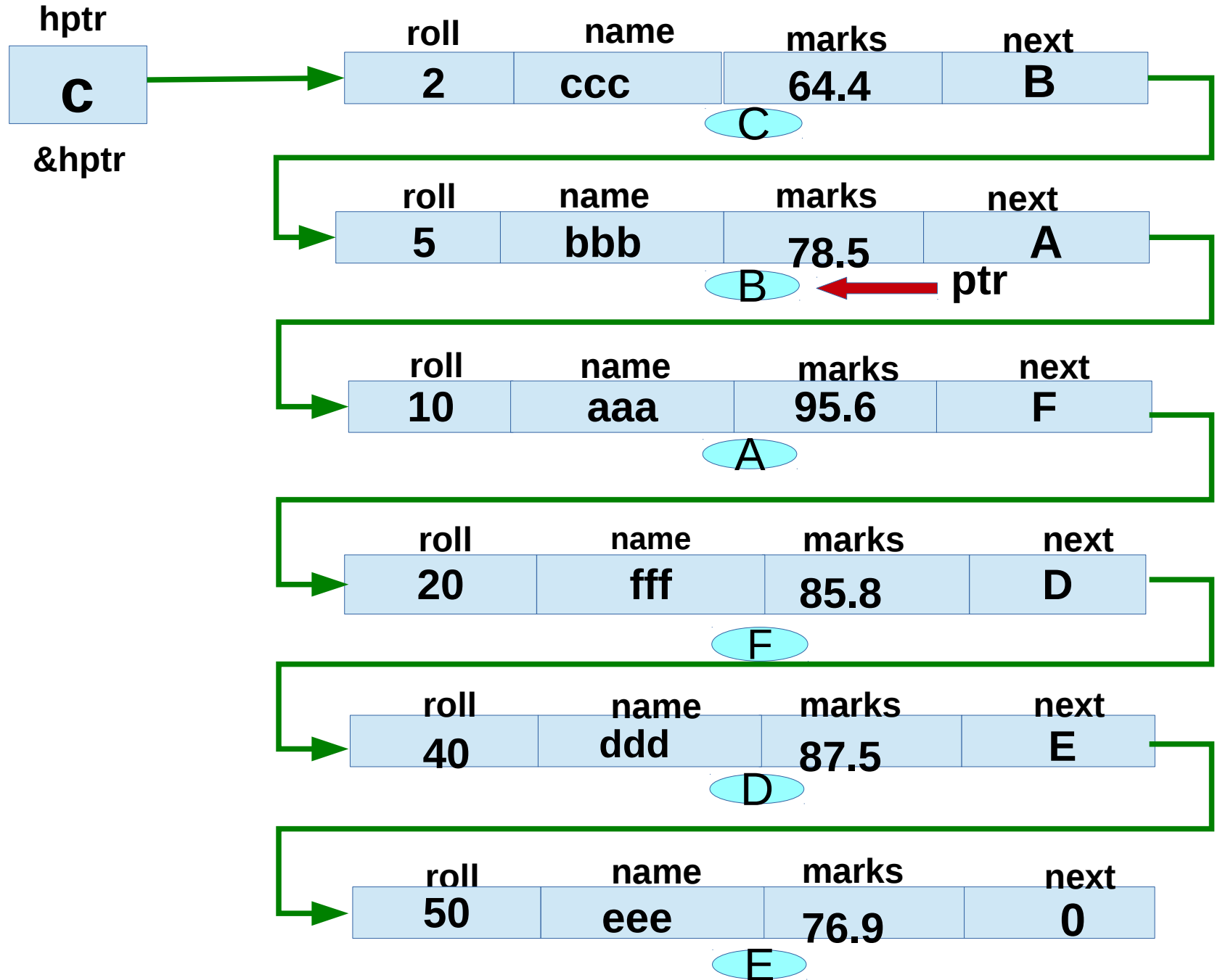


Printing the records

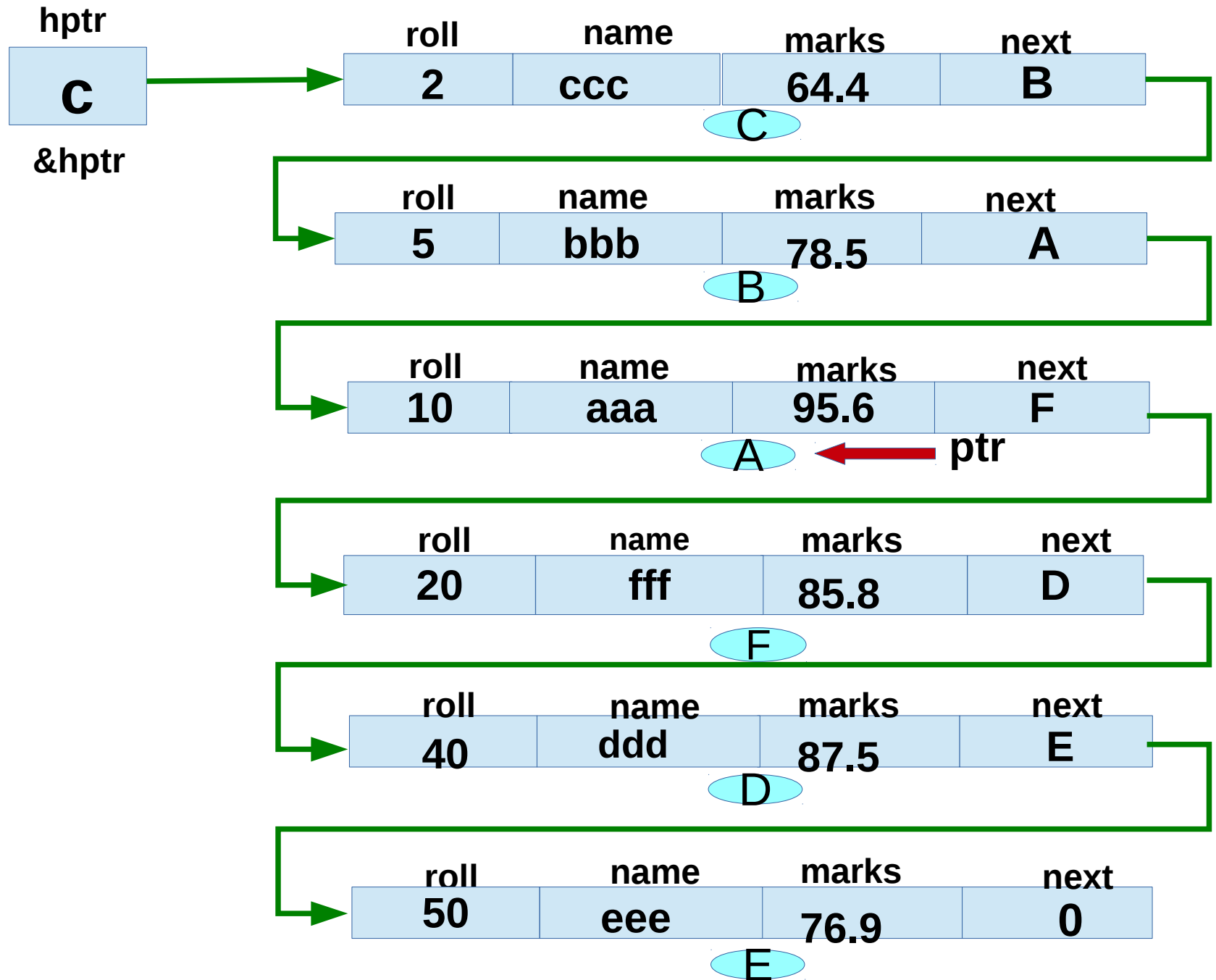
add_middle



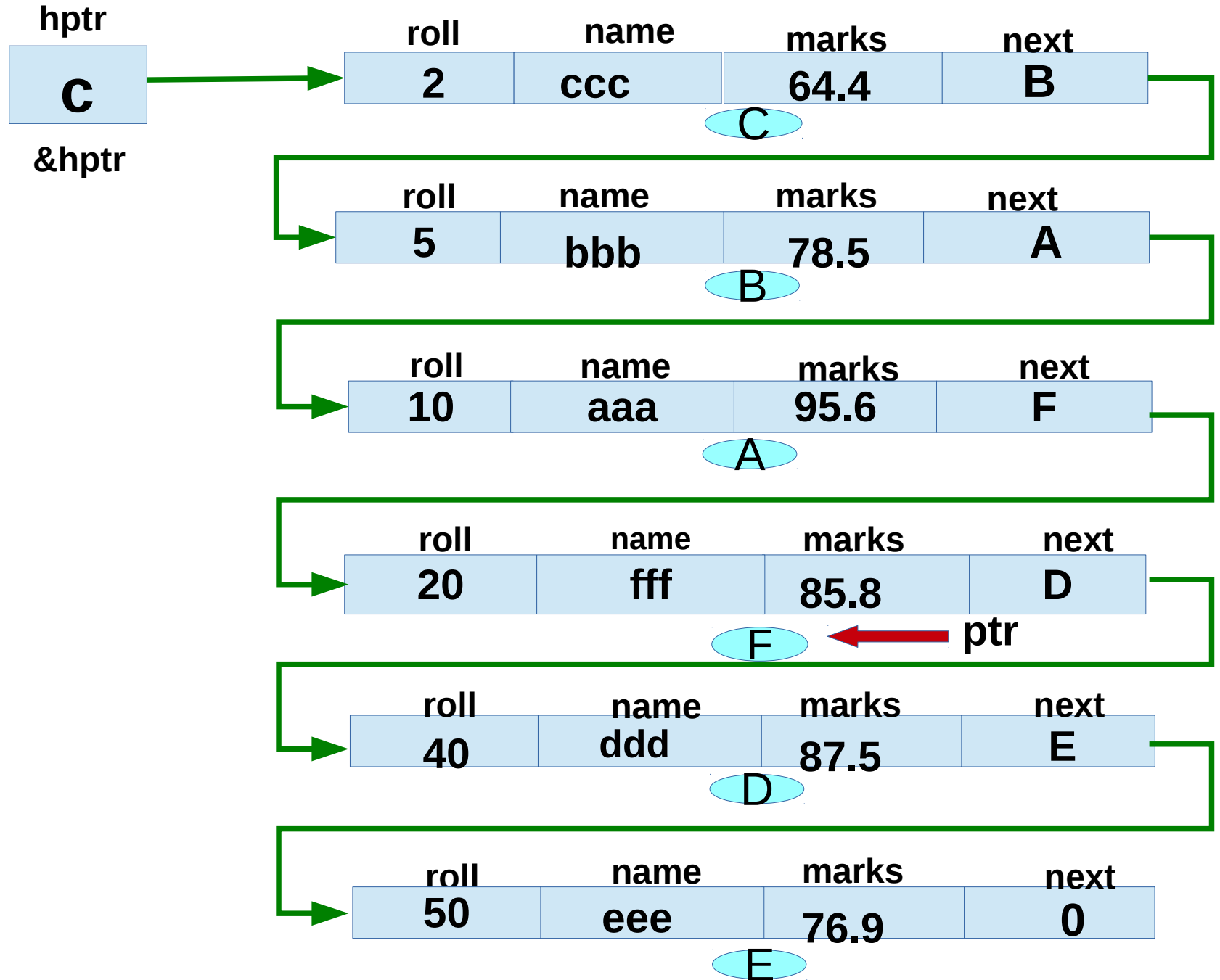
add_middle



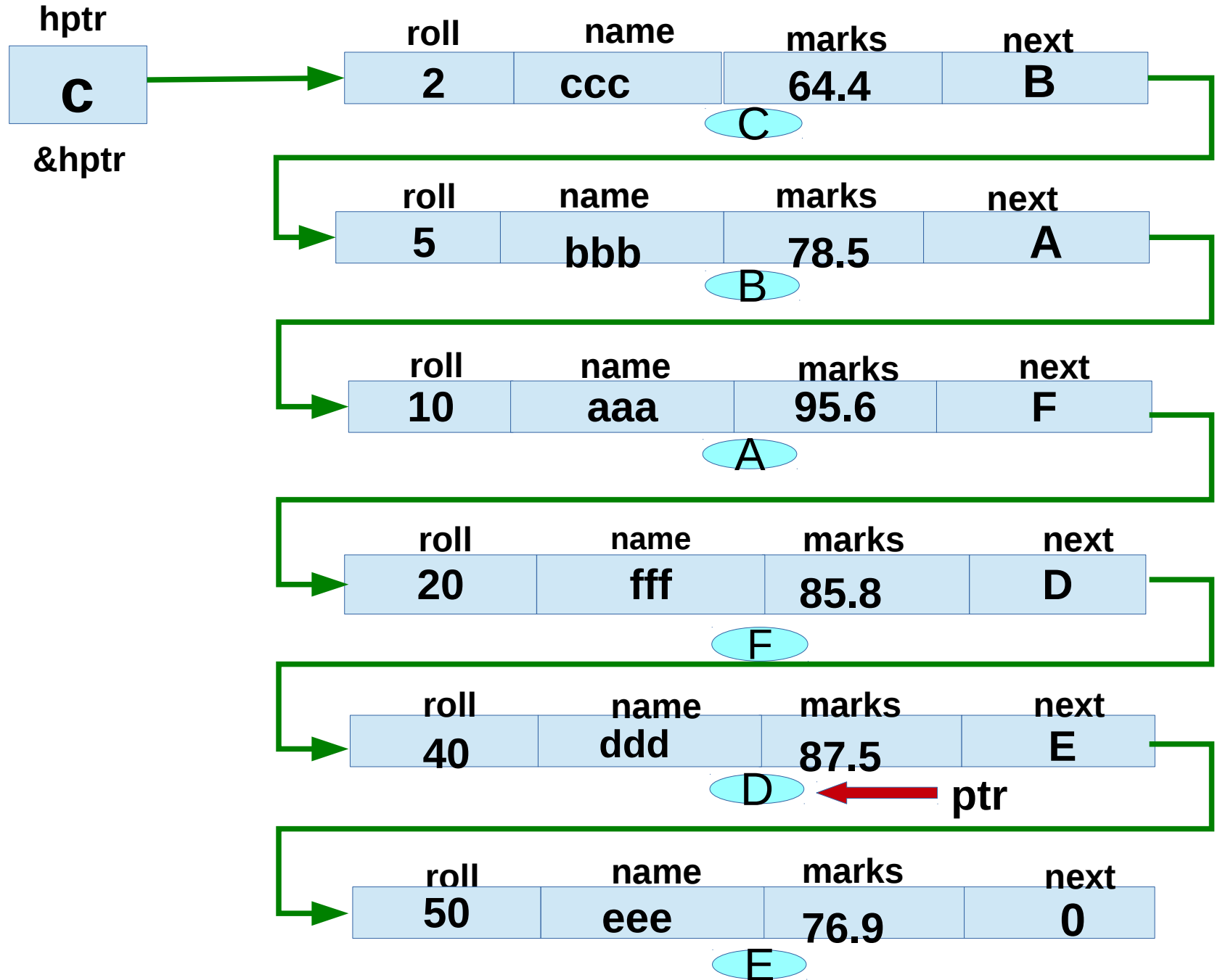
add_middle



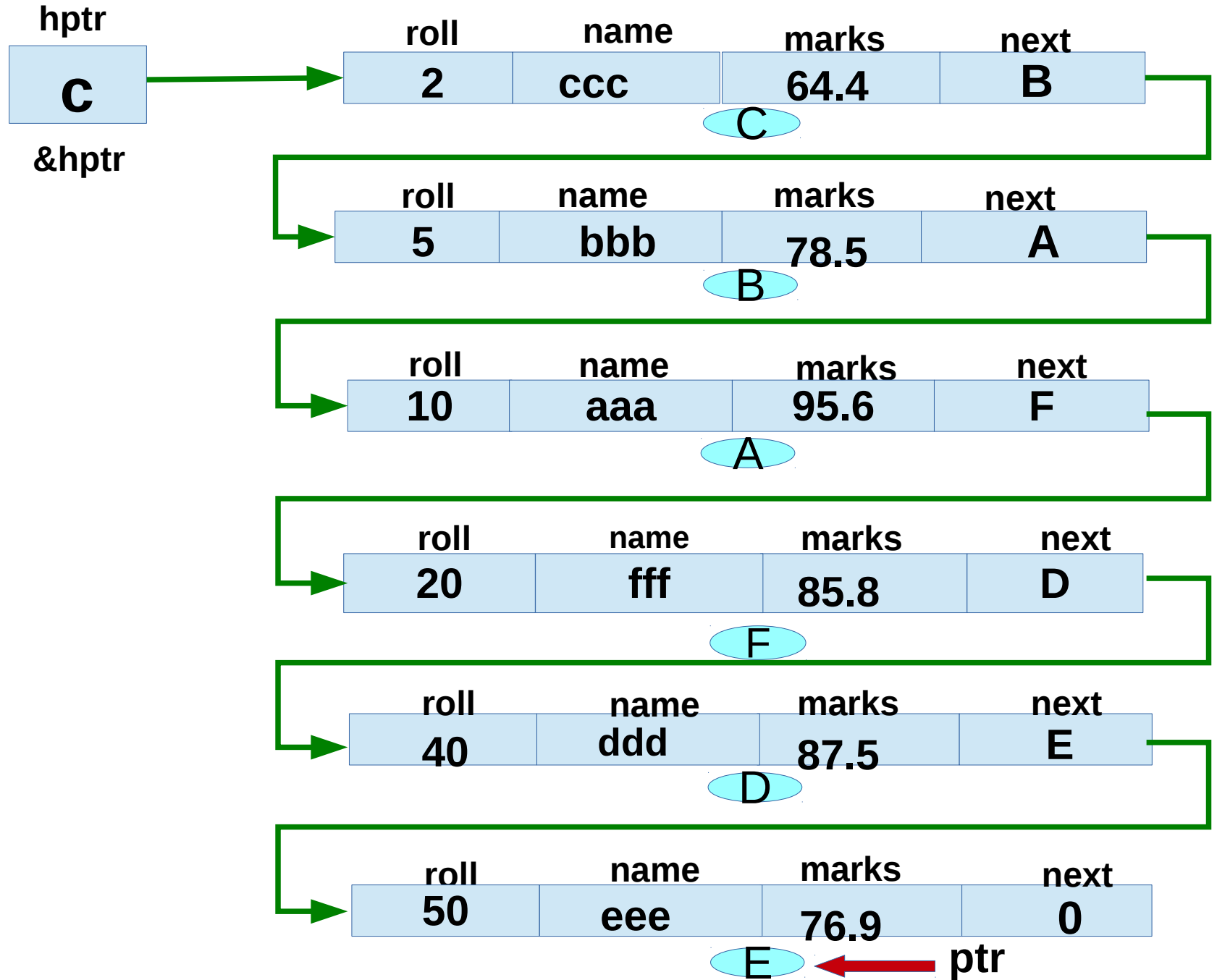
add_middle



add_middle



add_middle



add_middle

