Homework 9

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Problem 9.2

The algorithm for reversing a list saves the pointer to the next element in the list, then it updates the next pointer of the current element to point to the previous element.

Algorithm 1 ReverseList(head)

$cursor \leftarrow head$
$prev \leftarrow NULL$
while $cursor \rightarrow next \neq NULL$ **do**
    $next = cursor \rightarrow next$
    $cursor \rightarrow next = prev$
    $prev = cursor$
    $cursor = next$
end while
$cursor \rightarrow next = prev$