634932
You need to traverse a singly-linked list in reverse. What's the best
worst-case performance you can achieve?

     a. O(1)

     b. O(log N)

     *c. O(N)

     d. O(N log N)

     e. $O(N^2)$

     f. "
     g. "
     h. "
     i. "
     j. "

     General Feedback:

    Iterate through the list in the forward direction, but prepend each node on a
second list as you do. Then iterate through the second list, which will be in the desired
reverse order and traversable in O(N) time.

632271
Which data structure can be used to implement an abstract datatype such as
the StackADT or QueueADT?

     a. an array

     b. a linked list

     *c. both

     d. neither

     e.
     f. "
     g. "
     h. "
     i. "

     General Feedback:

    StackADT and QueueADT can both be implemented with either an array or a
stack. Either may be the better choice, depending on the purpose of the program and
the nature of the data being stored.

632278
Which data structure uses space more efficiently if the program is storing
substantially less data than expected?

     a. An array

```
*b. A linked list

c. They are both the same

d.
e.
f. "
g. "
h. "
```

```
General Feedback:
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For an array, you must set aside a block of memory in advance. A linked list only creates nodes for those elements that are actually contained in the list.

```
*b. A linked list


c. They are both the same

d.
e.
f. "
g. "
h. "
```