

! This quiz has been regraded; your new score reflects 0 questions that were affected.

## Practice 06 Ch 18 Linked List

**Due** May 21 at 7:59pm

**Points** 4.1

**Questions** 41

**Available** Apr 16 at 12am - May 21 at 7:59pm about 1 month

**Time Limit** 25 Minutes

**Allowed Attempts** Unlimited

## Instructions

Practice Quizzes 06 Ch 18 Linked List

Total 4.1 points, 0.1 point each

You may take as many time as you like.

Your best score is kept on record.

Take the Quiz Again

## Attempt History

	Attempt	Time	Score	Regraded
LATEST	<a href="#">Attempt 1</a>	10 minutes	3.93 out of 4.1	3.97 out of 4.1

! Correct answers are hidden.

Score for this attempt: **3.97** out of 4.1

Submitted Apr 27 at 12:05pm

This attempt took 10 minutes.

### Question 1

0.1 / 0.1 pts

When you create a linked list you must know in advance how many nodes the list will contain.

☐ True

☒ False

## Question 2

0.1 / 0.1 pts

Which type of list does NOT contain a null pointer at the end of the list?

☐ backwards linked

☐ doubly linked

☒ circular linked

☐ null linked

☐ None of these

## Question 3

0.1 / 0.1 pts

While traversing a list, a node pointer knows when it has reached the end of the list if

☐ it encounters the newline character

☒ it encounters a null pointer

☐ it finds itself back at the beginning of the list

☐ it encounters a sentinel such as 9999

**Question 4****0.1 / 0.1 pts**

The advantage a linked list has over a **vector** is that

- ☐ a linked list can dynamically shrink or grow and a **vector** cannot
- ☐ a linked list is smaller than a **vector**
- ☒ a node can be inserted or removed faster from a linked list than from a **vector**
- ☐ data removal and insertion are more accurate with a linked list than with a **vector**
- ☐ None of these

**Partial****Question 5****0.07 / 0.1 pts**

Select all that apply. Variations of the linked list are

- ☒ doubly linked list
- ☒ circular linked list
- ☒ frontward linked list
- ☒ backward linked list

**Question 6****0.1 / 0.1 pts**

A \_\_\_\_\_ is used to travel through a linked list and search for data.

- ☐ node
- ☒ pointer
- ☐ null pointer
- ☐ traversal operator
- ☐ None of these

### Question 7

0.1 / 0.1 pts

A list that contains pointers to the previous node, the next node, and a node in the third dimension is known as a triple linked list.

- ☐ True
- ☒ False

### Question 8

0.1 / 0.1 pts

In a circular linked list, the last node points to the

- ☐ head pointer
- ☐ tail pointer
- ☒ first node

☐ None of these

### Question 9

0.1 / 0.1 pts

ADT stands for

☐ Algorithm Dependent Template

☐ Algorithm Driven Template

☒ Abstract Data Type

☐ Automatic Data Type

☐ None of these

### Question 10

0.1 / 0.1 pts

A linked list class must take care of removing the dynamically allocated nodes and this is done by

☐ the constructor function

☒ the destructor function

☐ overriding the removal function

☐ overloading the memory persistence operator

☐ None of these

**Question 11****0.1 / 0.1 pts**

Select all that apply. Which of the following is a basic list operation?

☒ appending a node☒ traversing the list☒ inserting a node☒ deleting a node☐ None of these**Question 12****0.1 / 0.1 pts**

Select all that apply. Which of the following containers can add elements at their back without requiring traversal?

☒ the `list` container☐ the `circular_list` container☒ the `forward_list` container☐ the `reversal_list` container**Question 13****0.1 / 0.1 pts**

A linked list can grow and shrink as a program runs.

☒ True☐ False**Question 14****0.1 / 0.1 pts**

A linked list is called "linked" because each node in the series has a pointer that points to the next node in the list.

☒ True☐ False**Question 15****0.1 / 0.1 pts**

If the head pointer points to `nullptr`, this indicates

☐ the list has been previously created and then destroyed☐ the list needs to be destroyed☒ there are no nodes in the list☐ the list is full and cannot accept any new nodes☐ None of these**Question 16****0.1 / 0.1 pts**

How many steps are involved in the process of deleting a node?

- ☐ one: delete the node from memory
- ☒ two: remove the node without breaking links, then delete it from memory
- ☐ three: create a blank node, remove the node being deleted, insert the blank node
- ☐ four: create a blank node, insert the blank node before the node being deleted, remove the node being deleted, delete the blank node
- ☐ None of these

### Question 17

0.1 / 0.1 pts

The process of moving through a linked list is referred to as \_\_\_\_\_ the list.

- ☐ cruising
- ☒ traversing
- ☐ hopping
- ☐ revising
- ☐ None of these



**Question 18****0.1 / 0.1 pts**

The \_\_\_\_\_ of a linked list points to the first node in the list.

- ☐ starter
- ☒ head
- ☐ tail
- ☐ declaration
- ☐ None of these

**Question 19****0.1 / 0.1 pts**

To delete an entire list, normally you must traverse the list, deleting each node, one by one.

- ☒ True
- ☐ False

**Incorrect****Question 20****0 / 0.1 pts**

Nodes in a linked list are stored in contiguous memory.

- ☒ True
- ☐ False

**Question 21****0.1 / 0.1 pts**

A linked list is a series of connected

- ☐ ADTs
- ☐ vectors
- ☐ algorithms
- ☒ nodes
- ☐ None of these

**Question 22****0.1 / 0.1 pts**

To create a linked list you must first create a(n)

- ☐ header file
- ☐ function template
- ☐ exception
- ☒ struct
- ☐ None of these

**Question 23****0.1 / 0.1 pts**

Linked lists are less complex to code and manage than arrays.

☐ True

☒ False

### Question 24

0.1 / 0.1 pts

When working with a linked list one of the basic operations you can perform is to destroy the list.

☒ True

☐ False

### Question 25

0.1 / 0.1 pts

If there are no nodes in a linked list, you cannot append a node to the list.

☐ True

☒ False

### Question 26

0.1 / 0.1 pts

If new data needs to be added to a linked list, the program simply \_\_\_\_\_ and inserts it into the series.

- ☒ allocates another node
- ☐ removes a node
- ☐ borrows a node from the compiler
- ☐ Either removes a node or borrows a node from the compiler
- ☐ None of these

**Question 27****0.1 / 0.1 pts**

In an insertion or deletion routine: how many pointers are you required to create for use during the traversal process?

- ☒ two: one for the node under inspection and one for the previous node
- ☐ two: one for the node under inspection and one for the next node
- ☐ one: for the node being inserted or deleted
- ☐ three: one for the node under inspection, one for the next node, and one for the following node

**Question 28****0.1 / 0.1 pts**

When you delete a node from a list, you must ensure that the links in the list are not permanently broken.

- ☒ True

☐ False

**Question 29****0.1 / 0.1 pts**

A doubly linked list keeps track of the next node in the list as well as

- ☐ itself
- ☐ the head node
- ☐ the tail node
- ☒ the previous node
- ☐ None of these

**Question 30****0.1 / 0.1 pts**

To build a list initially, you can use a(n) \_\_\_\_\_ routine.

- ☐ build
- ☒ append
- ☐ constructor
- ☐ initialization
- ☐ None of these

**Question 31****0.1 / 0.1 pts**

A new node cannot become the first node in the list.

- ☐ True
- ☒ False

**Question 32****0.1 / 0.1 pts**

To append a node to a list means to

- ☐ delete a node from the beginning of the list
- ☐ delete a node from the end of the list
- ☐ add a node to the beginning of the list
- ☒ add a node to the end of the list
- ☐ None of these

**Question 33****Original Score: 0.07 / 0.1 pts Regraded Score: 0.1 / 0.1 pts**

**! This question has been regraded.**

Select all that apply. A \_\_\_\_\_ list contains pointers to the nodes before it and after it.

- ☐ multi linked
- ☒ circular linked
- ☐ singly linked
- ☒ doubly linked

**Question 34****0.1 / 0.1 pts**

Deleting an entire list simply requires the use of the `delete` operator.

- ☐ True
- ☒ False

**Question 35****0.1 / 0.1 pts**

The Standard Template Library (STL) provides a linked list container.

- ☒ True
- ☐ False

**Question 36****0.1 / 0.1 pts**

Appending a node means adding it to the end of a list, and \_\_\_\_\_ a node means putting a new node in the list, but not necessarily at the end.

☐ concatenating☐ popping☐ clamping☒ inserting☐ None of these**Question 37****0.1 / 0.1 pts**

The last node in a linked list points to

☒ a null pointer☐ the previous node☐ the first node in the list☐ nothing; the last node does not contain a pointer☐ None of these**Question 38****0.1 / 0.1 pts**

A linked list can consist of structs, objects, and other abstract data types.

☒ True☐ False



**Question 39****0.1 / 0.1 pts**

To insert a new node in ascending order into a list, the list must be

- ☐ arranged in descending order
- ☐ randomly ordered
- ☐ empty
- ☒ arranged in ascending order
- ☐ None of these

**Question 40****0.1 / 0.1 pts**

The list container provided by the Standard Template Library is a template version of a

- ☐ singly linked list
- ☒ doubly linked list
- ☐ circular linked list
- ☐ backward linked list
- ☐ None of these

**Question 41****0.1 / 0.1 pts**

A new node must always be made the last node in the list.

☐ True

☒ False

Quiz Score: **3.97** out of 4.1