CS23336-Introduction to Python Programming

Started on Wednesday, 6 November 2024, 8:40 PM

State Finished

Completed on Wednesday, 6 November 2024, 8:46 PM

Time taken 6 mins 16 secs

Question 1

Complete

Marked out of 1.00

Flag question

Question text

During a binary search, what happens if the target element matches the middle element? —Question 1 Answer—

| a. |
|---|
| The search continues in the left sublist |
| |
| b. |
| The search ends successfully |
| |
| c. |
| The search continues in the right sublist |
| |
| d. |
| The list is sorted |

Question 2

Complete

Marked out of 1.00

Flag question

Question text

In linear search, if the target element is not found in the list, what is the result? —Question 2 Answer—

| a. |
|---------------------------------------|
| The search is considered unsuccessful |
| |
| b. |
| The first element is returned |
| |
| C. |
| An error is raised |
| |
| d. |
| The last element is returned |

Question 3

Complete

Marked out of 1.00

Flag question

Question text

In binary search, how is the middle element determined?

| - Question 3 Answer |
|--|
| ○ a. |
| By starting from the first element |
| b. |
| By dividing the list length by two |
| ○ c. |
| By comparing each element sequentially |
| ○ d. |
| By using a hash function |
| Question 4 |
| Complete |
| Marked out of 1.00 |
| If It is a second secon |
| Question text |
| n a linear search, how many comparisons are made in the worst-case scenario to find an element in a list of size n? |
| -Question 4 Answer |
| a. |
| n |
| ○ b. |
| log n |
| |
| c. n/2 |
| |
| d. 1 |
| Question 5 |
| Complete |
| Marked out of 1.00 |
| If In the second |
| Question text |
| Finding the location of a given item in a collection of items is called |
| -Question 5 Answer- |
| |
| a. |
| Searching |
| |
| b. |
| Discovering |
| |
| C. |
| Finding |
| |
| d. |
| Mining |
| |

| Complete |
|--------------------|
| Marked out of 1.00 |
| Flag guestion |

Question text

What type of search would be most appropriate for finding an element in a list that is frequently updated?
—Ouestion 6 Answer—

Question 7

Complete
Marked out of 1.00

Flag question

Question text

What is the key characteristic of binary search?
—Question 7 Answer

| a. |
|---|
| It works on unsorted lists |
| |
| b. |
| It always starts from the beginning of the list |
| |
| C. |
| It can be applied only if the list is sorted |
| |
| d. |
| It compares elements sequentially |

Question 8

Complete
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Flag question

Question text

Which of the following best describes the process of a linear search?

—Question 8 Answer

| Question 8 Answer |
|--------------------------------------|
| |
| a. |
| Checking each element sequentially |
| |
| b. |
| Sorting the list before searching |
| |
| c. |
| Skipping every second element |
| |
| d. |
| Dividing the list in half repeatedly |

Question 9

| Complete Marked out of 1.00 Flag question |
|---|
| Question text |

What happens in a binary search if the list has an even number of elements?

—Ouestion 9 Answer

| -Question 5 Answer |
|---|
| |
| a. |
| The middle element is chosen randomly |
| |
| b. |
| The search stops |
| |
| c. |
| The lower middle element is chosen as the middle element |
| |
| d. |
| The higher middle element is chosen as the middle element |
| |

Question 10

Complete Marked out of 1.00 Flag question

Question text

Which of the following scenarios is best suited for applying binary search? -Question 10 Answer

| a. |
|---|
| When the list contains duplicate elements |
| |
| b. |
| When the list is sorted |
| |
| C. |
| When the list is very small |
| |
| d. |
| When the list is unsorted |

Question 11

Complete Marked out of 1.00 Flag question

Question text

| destion 11 Answer |
|-------------------|
| |
| |
| Ierge search |
| |
| |
| uick search |
| |
| |
| ubble search |
| |
| |
| inear search |

| Complete Marked out of 1.00 Flag question |
|--|
| Question text |
| In which situation i |

| In which situation is linear search more efficient than binary search? |
|--|
| Question 12 Answer |
| |
| a. |
| When the list is small and unsorted |
| |
| b. |
| When the list is large and sorted |
| |
| C. |
| When the list is small and sorted |
| |
| d. |
| When the list is large and unsorted |
| Ougstion 12 |

Question 13

Complete Marked out of 1.00 Flag question

Question text

search takes a sorted/ordered list and divides it in the middle.

| Question 13 Answer |
|--------------------|
| |
| a. |
| u. |
| Hash |
| |
| b. |
| u. |
| Both (1) & (3) |
| |
| C. |
| ·· |
| Linear |
| |
| |
| d. |
| Binary |
| Dilial y |
| |

Question 14

Complete Marked out of 1.00 Flag question

Question text

In binary search, if the target element is less than the middle element, where does the search continue?

| -Question 14 Answer | | |
|----------------------|--|--|
| \bigcirc | | |
| a. | | |
| In the entire list | | |
| \bigcirc | | |
| b. | | |
| In the right sublist | | |
| | | |
| С. | | |
| | | |

| In the left sublist | |
|------------------------------|--|
| \circ | |
| d. | |
| At the beginning of the list | |
| | |

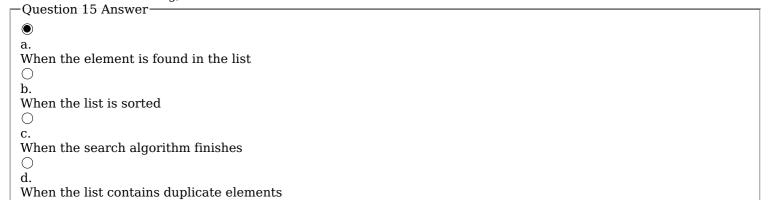
Question 15

Complete
Marked out of 1.00

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Question text

In the context of searching, what is a successful search?



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