RAJALAKSHMI ENGINEERING COLLEGE
An AUTONOMOUS Institution
Affiliated to ANNA UNIVERSITY, Chennai

REC-OCATS-1

CS23336-Introduction to Python Programming

Started on	Sunday, 17 November 2024, 10:06 AM
State	Finished
Completed on	Sunday, 17 November 2024, 10:17 AM
Time taken	11 mins 1 sec

Question 1

Complete
Marked out of 1.00
☐ Flag question

Question text

Which of the following is not a limitation of binary search algorithm?

Question 1 Answer

◉
a.

Must use a sorted array

○
b.

There must be a mechanism to access middle element directly

○
c.

Binary search algorithm is not efficient when the data elements more than 1500

○
d.

Requirement of sorted array is expensive when a lot of insertion and deletions are needed

Question 2

Complete
Marked out of 1.00
☐ Flag question

Question text

If a list contains 1000 elements, how many comparisons would a binary search typically make in the worst case?

Question 2 Answer

○
a.
1000
◉
b.
10
○
c.
500
○
d.
100

Question 3

Complete
Marked out of 1.00
☐ Flag question

Question text

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

Question 3 Answer

○
a.
Hash search
○
b.
Linear search
○
c.
Binary search
◉
d.
Interpolation search

Question 4

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 4 Answer

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

Question 5

Complete
Marked out of 1.00
☐ Flag question

Question text

What is the first step in binary search?

Question 5 Answer

○
a.
Divide the list into two equal parts
◉
b.
Compare the target element with the middle element in the list
○
c.
Compare the target element with the first element in the list
○
d.
Sort the list

Question 6

Complete
Marked out of 1.00
☐ Flag question

Question text

Which method of searching involves sequentially comparing each element until a match is found?

Question 6 Answer

○
a.
Binary search
◉
b.
Linear search
○
c.
Jump search
○
d.
Hashing

Question 7

Complete
Marked out of 1.00
☐ Flag question

Question text

If the target element is greater than the middle element in binary search, where does the search continue?

Question 7 Answer

○
a.
At the beginning of the list
○
b.
In the left sublist
○
c.
In the middle of the list
◉
d.
In the right sublist

Question 8

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 8 Answer

○
a.
The last element is returned
◉
b.
The search is considered unsuccessful
○
c.
The first element is returned
○
d.
An error is raised

Question 9

Complete
Marked out of 1.00
☐ Flag question

Question text

Which of the following statements about linear search is true?

Question 9 Answer

◉
a.
Linear search can be applied to both sorted and unsorted lists.
○
b.
Linear search is more efficient than binary search on large lists.
○
c.
Linear search divides the list into halves.
○
d.
Linear search requires the list to be sorted.

Question 10

Complete
Marked out of 1.00
☐ Flag question

Question text

What is the advantage of binary search over linear search?

Question 10 Answer

◉
a.
Binary search works on unsorted lists
○
b.
Binary search has a lower time complexity on large, sorted lists
○
c.
Binary search does not require dividing the list
○
d.
Binary search can find multiple instances of the target element

Question 11

Complete
Marked out of 1.00
☐ Flag question

Question text

In linear search, how is the element searched?

Question 11 Answer

○
a.
By using a hash function
○
b.
By dividing the list into halves
◉
c.
By comparing each element in the list sequentially
○
d.
By sorting the list first

Question 12

Complete
Marked out of 1.00
☐ Flag question

Question text

What is the time complexity of binary search in the worst case?

Question 12 Answer

○
a.
O(1)
◉
b.
O(log n)
○
c.
O(n log n)
○
d.
O(n)

Question 13

Complete
Marked out of 1.00
☐ Flag question

Question text

Finding the location of a given item in a collection of items is called

Question 13 Answer

○
a.

Mining

◉
b.

Searching

○
c.

Discovering

○
d.

Finding

Question 14

Complete
Marked out of 1.00
☐ Flag question

Question text

In which situation is linear search more efficient than binary search?

Question 14 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

Question 15

Complete
Marked out of 1.00
☐ Flag question

Question text

During a linear search, what is the maximum number of comparisons needed to find an element in a list of size n?

Question 15 Answer

◯
a.
n/2
◯
b.
log n
◉
c.
n
◯
d.
n-1

Save the state of the flags

Finish review

Skip Quiz navigation

Quiz navigation

Question 1 This page Question 2 This page Question 3 This page Question 4 This page Question 5 This page Question 6 This page Question 7 This page Question 8 This page Question 9 This page Question 10 This page Question 11 This page Question 12 This page Question 13 This page Question 14 This page Question 15 This page

Show one page at a time Finish review