Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 1

Answer saved

Marked out of 1.00

Flag question

A heap is not a binary tree

Select one:

- True
- False

Next page

QUIZ NAVIGATION

1 2 3 4 5 6 7 8 9
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Finish attempt ...

Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 2

Answer saved

Marked out of 1.00

Flag question

While deleting an element from a heap, Up-heap bubbling is used to restore the heap order property

Select one:

- True
- False

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QUIZ NAVIGATION

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Algorithms Design (S2-19_SSZG519)(Flipped)

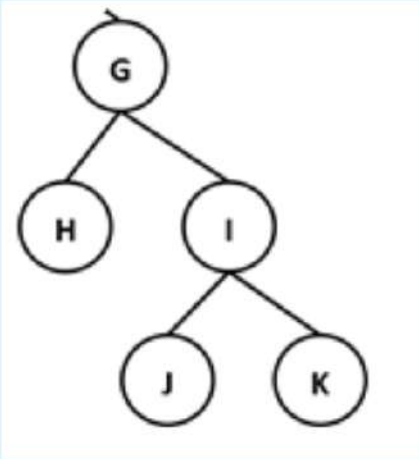
Question 3

Answer saved

Marked out of 1.00

Flag question

The preorder traversal visits the nodes of the tree in the order:



Select one:

- G I J H K
- G H I J K
- H I J K G
- J K G I H

Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

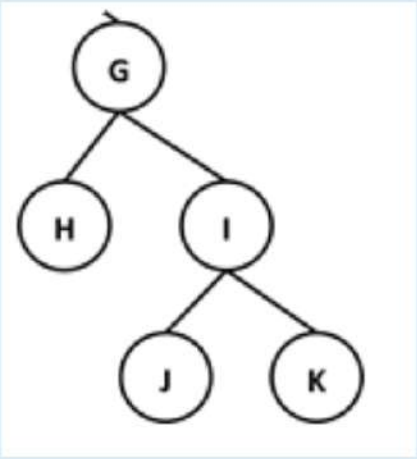
Question 4

Answer saved

Marked out of 1.00

Flag question

The postorder traversal visits the nodes of the tree in the order:



Select one:

- H J K I G
- H I G K J
- J K G I H
- H G J I K

Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 5

Answer saved

Marked out of 1.00

Flag question

The minimum number of external nodes in a binary tree T of height h is n

Select one:

- True
- False

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QUIZ NAVIGATION

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Finish attempt

Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

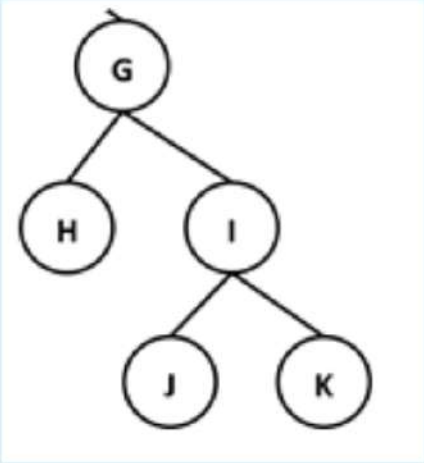
Question 6

Answer saved

Marked out of 1.00

Flag question

In the given tree, the sibling of node I is node H



Select one:

- True
- False

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QUIZ NAVIGATION

19_SSZG519)(Flipped)

Question 7

Answer saved

Marked out of 1.00

Flag question

The preorder traversal visits the nodes of the tree in the following order

Select one:

- Right, Root, Root
- Left, Right, Root
- Root, Left, Right
- Left, Root, Right

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Next page

QUIZ NAVIGATION

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Finish attempt ...

19_SSZG519)(Flipped)

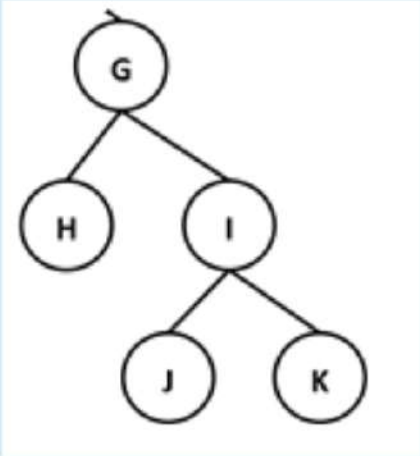
Question 8

Answer saved

Marked out of 1.00

Flag question

The depth of node J in the following tree is 0



Select one:

- True
- False

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QUIZ NAVIGATION

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19_SSZG519)(Flipped)

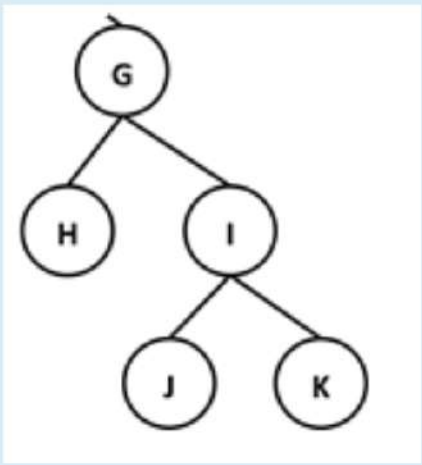
Question 9

Answer saved

Marked out of 1.00

Flag question

Is G-H-I-J a path in the given tree?



Select one:

- True
- False

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QUIZ NAVIGATION

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Algorithms Design (S2-19_SSZG519)(Flipped)

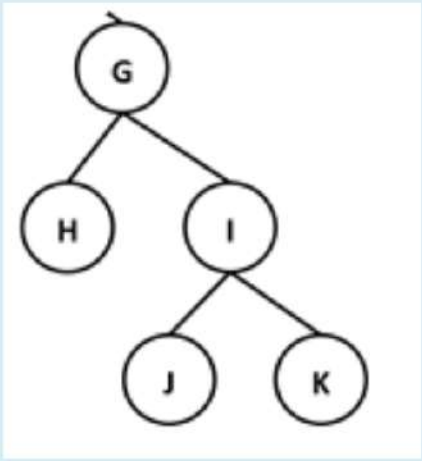
Question 10

Answer saved

Marked out of 1.00

Flag question

The height of the following tree is 3



Select one:

- True
- False

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Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 11

Answer saved

Marked out of 1.00

Flag question

Depth of the root node is

Select one:

- 0
- one more than the depth of its children
- two more than the depth of its children
- 1

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QUIZ NAVIGATION

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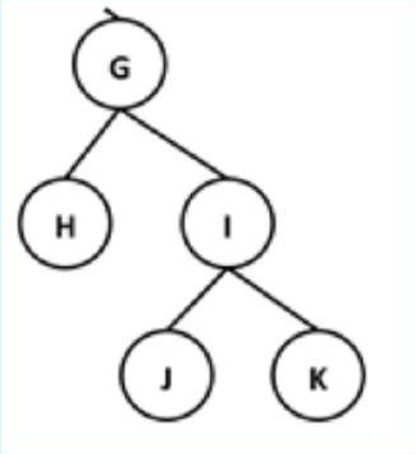
Question 12

Answer saved

Marked out of 1.00

Flag question

The inorder traversal visits the nodes of the tree in the order:



Select one:

- H G J I K
- I J K H G
- I K J H G
- H I G K J

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QUIZ NAVIGATION

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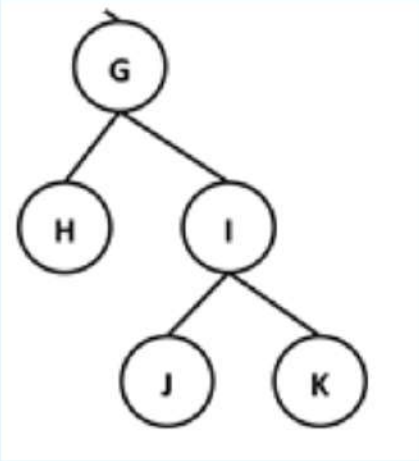
Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 13

Answer saved

Marked out of 1.00

Flag question



The above tree is a min-heap.

Select one:

- True
- False

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QUIZ NAVIGATION

Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 14

Answer saved

Marked out of 1.00

Flag question

The time taken to insert an element into a heap is O(log n)

Select one:

- True
- False

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Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 15

Answer saved

Marked out of 1.00

Flag question

In a complete binary tree, all levels except the last level are completely (maximally) filled with nodes and in the last level, nodes are filled from right to left.

Select one:

- True
- False

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Finish attempt ...

19_SSZG519)(Flipped)

Question 16

Answer saved

Marked out of 1.00

Flag question

Up-heap bubbling can stop at

Select one or more:

- [x] the root
- [x] any leaf
- [x] an internal node where the heap order property is satisfied
- [ ] an internal node where the heap order property is not satisfied

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Finish attempt

Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 17

Answer saved

Marked out of 1.00

Flag question

A node in a tree that does not have a parent is called as a leaf

Select one:

- True
- False

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QUIZ NAVIGATION

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Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 18

Answer saved

Marked out of 1.00

Flag question

Which of the following statements are true about a max-heap

Select one or more:

- [ ] It is used to implement min-priority queue
- [x] The element stored at the root node will have the maximum value
- [x] It is used to implement max-priority queue
- [ ] The element stored at the root node will have the minimum value

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Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

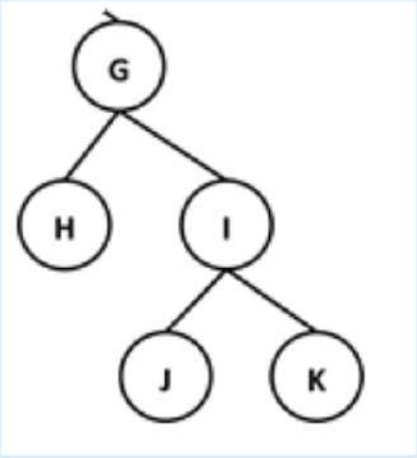
Question 19

Answer saved

Marked out of 1.00

Flag question

The following tree is a proper binary tree



Select one:

- True
- False

Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 20

Answer saved

Marked out of 1.00

Flag question

The maximum height h of a binary tree with n nodes is

Select one:

- 1
- h
- n-1
- n

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QUIZ NAVIGATION

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Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 21

Answer saved

Marked out of 1.00

Flag question

Height of an internal node in the tree is

Select one:

- one minus the maximum height of its children
- always 0
- one plus the maximum height of its children
- one plus the minimum height of its children

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Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 22

Answer saved

Marked out of 1.00

Flag question

In the array representation of a binary tree where the root element is stored at index 1. The right child of a node at index i is at position

Select one:

- i
- 2i-1
- 2i
- 2i + 1

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Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 23

Answer saved

Marked out of 1.00

Flag question

In the linked list representation of binary trees, nodes for which both left and right pointers are NULL are called as

Select one:

- External nodes
- Parent node
- Root node
- Internal nodes

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Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

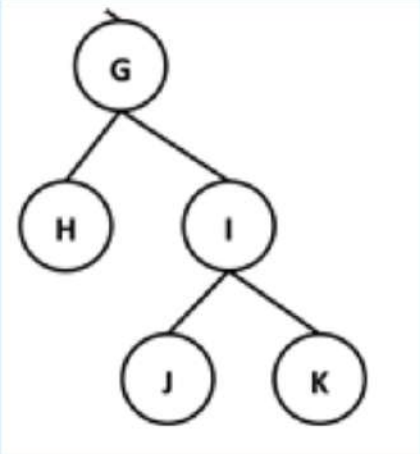
Question 24

Answer saved

Marked out of 1.00

Flag question

The following tree is a complete binary tree



Select one:

- True
- False

Data Structures and Algorithms Design (S2-19_SSZG519)(Flipped)

Question 25

Answer saved

Marked out of 1.00

Flag question

A complete binary tree is always a proper binary tree

Select one:

- True
- False

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Finish attempt ...

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Finish attempt