



Quiz Master

CS301(LECT 31 TO 35)

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All mcqs are 100% correct. For any type of help(specially related to CS619 project) you can contact me. I will guide you properly.


For more information about CS619 you can visit my Youtube channel

<https://www.youtube.com/channel/UCINsFwDiB62SValCcPDZbRQ/playlists>

Question # 1 of 10 (Start time: 10:12:22 AM, 26 August 2020)

If a tree has 50 nodes, then the total edges/links in the tree will be :

Select the correct option

- | | |
|----------------------------------|----|
| <input type="radio"/> | 55 |
| <input type="radio"/> | 51 |
| <input type="radio"/> | 50 |
| <input checked="" type="radio"/> | 49 |
- RIZ MUGHAL
- 

Question # 2 of 10 (Start time: 10:12:42 AM, 26 August 2020)

The percolateDown procedure will move the smaller value ____ and bigger value _____.

Select the correct option

- | | |
|----------------------------------|------------|
| <input type="radio"/> | left,right |
| <input type="radio"/> | right,left |
| <input type="radio"/> | down,up |
| <input checked="" type="radio"/> | up,down |

Question # 3 of 10 (Start time: 10:13:04 AM, 26 August 2020)

Total Marks: 1

Suppose there are 100 elements in an equivalence class, so initially there will be 100 trees. The collection of these trees is called _____.

Select the correct option

- | | | |
|----------------------------------|---------|----|
| <input type="radio"/> | Cluster | // |
| <input type="radio"/> | Class | // |
| <input checked="" type="radio"/> | Forest | // |
| <input type="radio"/> | Bunch | // |

Question # 4 of 10 (Start time: 10:13:24 AM, 26 August 2020)

For a perfect binary tree of height h , having N nodes, the sum of heights of nodes is _____.

Select the correct option

<input checked="" type="radio"/>	$N - h - 1$
<input type="radio"/>	$N - 1$
<input type="radio"/>	$N - 1 + h$
<input type="radio"/>	$N - (h - 1)$

Question # 5 of 10 (Start time: 10:13:43 AM, 26 August 2020)

given the values are the array representation of heap:
12 23 26 31 34 44 56 64 78 100
What is the 5th smallest element in the given heap?

Select the correct option

<input type="radio"/>	31
<input checked="" type="radio"/>	34
<input type="radio"/>	44
<input type="radio"/>	56

Question # 6 of 10 (Start time: 10:14:01 AM, 26 August 2020)

Sorting procedure normally takes _____ time.

Select the correct option

<input checked="" type="radio"/>	NLogN
<input type="radio"/>	2N
<input type="radio"/>	N^*N^*N
<input type="radio"/>	N

Question # 7 of 10 (Start time: 10:14:22 AM, 26 August 2020)

To

If there are 100 elements in an equivalence class then we will have _____ sets initially.

Select the correct option

- 50
- 100
- 1000
- 80

RIZ MUGHAL

R

Question # 8 of 10 (Start time: 10:14:41 AM, 26 August 2020)

The expression
if (! heap->isEmpty())
checks

Select the correct option

- | | |
|----------------------------------|------------------------|
| <input type="radio"/> | Heap is empty |
| <input type="radio"/> | Heap is full |
| <input checked="" type="radio"/> | Heap is not empty |
| <input type="radio"/> | Not a valid expression |

RIZ MUGHAL

R

Question # 9 of 10 (Start time: 10:15:00 AM, 26 August 2020)

Total Marks

If ahmad is boss of ehsan and ehsan is boss of umer then ahmad is also boss of umer.
The above mentioned relation is _____.

Select the correct option

<input type="radio"/>	Reflexive
<input type="radio"/>	Symmetry
<input checked="" type="radio"/>	Transitive
<input type="radio"/>	None of given

RIZ MUGHAL

R

Question # 10 of 10 (Start time: 10:15:19 AM, 26 August 2020)

Total Ma

If there are 100 elements in a heap, and 100 deleteMin operation are performed, will get _____ list

Select the correct option

<input checked="" type="radio"/>	Sorted
<input type="radio"/>	Unsorted
<input type="radio"/>	Nonlinear
<input type="radio"/>	None of given

2nd account

Question # 1 of 10 (Start time: 10:18:57 AM, 26 August 2020)

If a tree has 20 edges/links, then the total number of nodes in the tree will be :

Select the correct option

- | | |
|----------------------------------|---------------------|
| <input type="radio"/> | 19 |
| <input type="radio"/> | 20 |
| <input checked="" type="radio"/> | 21 |
| <input type="radio"/> | Can't be determined |

Question # 2 of 10 (Start time: 10:19:18 AM, 26 August 2020)

Which property of equivalence relation is satisfied if we say:
Ahmad R(is related to) Ahmad

Select the correct option

<input checked="" type="radio"/>	Reflexivity
<input type="radio"/>	Symmetry
<input type="radio"/>	Transitivity
<input type="radio"/>	All of the above

RIZ MUGHAL

Question # 3 of 10 (Start time: 10:19:36 AM, 26 August 2020)

If a tree has 50 nodes, then the total edges/links in the tree will be :

Select the correct option

- | | |
|----------------------------------|----|
| <input type="radio"/> | 55 |
| <input type="radio"/> | 51 |
| <input type="radio"/> | 50 |
| <input checked="" type="radio"/> | 49 |
- RIZ MUGHAL*
- R*

Question # 4 of 10 (Start time: 10:20:00 AM, 26 August 2020)

To

The total number of nodes on 5th level of a perfect binary tree are :

Select the correct option

- | | |
|----------------------------------|----|
| <input type="radio"/> | 16 |
| <input type="radio"/> | 15 |
| <input type="radio"/> | 31 |
| <input checked="" type="radio"/> | 32 |

RIZ MUGHAL

Question # 5 of 10 (Start time: 10:20:21 AM, 26 August 2020)

Total Marks: 1

If we want to find median of 50 elements, then after applying buildHeap method, how many times deleteMin method will be called ?

Select the correct option

- | | | |
|----------------------------------|----|---|
| <input type="radio"/> | 5 | / |
| <input checked="" type="radio"/> | 25 | / |
| <input type="radio"/> | 35 | / |
| <input type="radio"/> | 50 | / |

RIZ MUGHAL

Question # 6 of 10 (Start time: 10:20:42 AM, 26 August 2020)

Total

Suppose there are a set of fruits and a set of vegetables. Both sets are _____ sets.

Select the correct option

<input checked="" type="radio"/>	Disjoint
<input type="radio"/>	Subsets
<input type="radio"/>	Whole
<input type="radio"/>	Equal

Question # 7 of 10 (Start time: 10:21:02 AM, 26 August 2020)

Which of the following properties are satisfied by Equivalence relationship?

Select the correct option

- | | |
|----------------------------------|--------------------------------------|
| <input type="radio"/> | Reflexive , Symmetric |
| <input type="radio"/> | Reflexive , Transitive |
| <input type="radio"/> | Symmetric , transitive |
| <input checked="" type="radio"/> | Reflexive , Symmetric and Transitive |
- RIZ MUGHAL
- R

Question # 8 of 10 (Start time: 10:21:27 AM, 26 August 2020)

Total

Which of the following heap method lowers the value of key at position 'p' by the amount 'delta'?

Select the correct option

- | | |
|----------------------------------|------------------------|
| <input type="radio"/> | increaseKey(p,delta) |
| <input checked="" type="radio"/> | decreaseKey(p,delta) |
| <input type="radio"/> | percolateDown(p,delta) |
| <input type="radio"/> | remove(p,delta) |
- RIZ MUGHAL
- R

Question # 9 of 10 (Start time: 10:21:48 AM, 26 August 2020)

Total M

given the values are the array representation of heap;

12 23 26 31 34 44 56 64 78 100

If we perform 4 deleteMin operations, the last element deleted is _____.

Select the correct option

- | | |
|----------------------------------|----|
| <input checked="" type="radio"/> | 31 |
| <input type="radio"/> | 34 |
| <input type="radio"/> | 44 |
| <input type="radio"/> | 56 |

Question # 10 of 10 (Start time: 10:22:06 AM, 26 August 2020)

T

given the values are the array representation of heap;
12 23 26 31 34 44 56 64 78 100
What is the 5th smallest element in the given heap?

Select the correct option

<input type="radio"/>	31
<input checked="" type="radio"/>	34
<input type="radio"/>	44
<input type="radio"/>	56

RIZ MUGHAL

R

3rd account

Question # 1 of 10 (Start time: 10:24:39 AM, 26 August 2020)

Total Marks: 1

If Ahmed is cousin of Ali and Ali is cousin of Asad then Ahmed is also cousin of Asad. This statement has the following property

Select the correct option

- | | | |
|----------------------------------|------------------|----|
| <input type="radio"/> | Reflexivity | // |
| <input type="radio"/> | Symmetry | // |
| <input checked="" type="radio"/> | Transitivity | // |
| <input type="radio"/> | All of the above | // |

RIZ MUGHAL

R

Question # 2 of 10 (Start time: 10:24:57 AM, 26 August 2020)

Total Marks: 1

If we want to find 3rd minimum element from an array of elements, then after applying buildHeap method, how many times deleteMin method will be called ?

Select the correct option

- | | | |
|----------------------------------|---|----|
| <input type="radio"/> | 1 | // |
| <input type="radio"/> | 2 | // |
| <input checked="" type="radio"/> | 3 | // |
| <input type="radio"/> | 4 | // |

RIZ MUGHAL

R

Question # 3 of 10 (Start time: 10:25:16 AM, 26 August 2020)

Total

The total number of nodes on 5th level of a perfect binary tree are :

Select the correct option

- | | |
|----------------------------------|----|
| <input type="radio"/> | 16 |
| <input type="radio"/> | 15 |
| <input type="radio"/> | 31 |
| <input checked="" type="radio"/> | 32 |

RIZ MUGHAL



Question # 4 of 10 (Start time: 10:25:39 AM, 26 August 2020)

If the height of a perfect binary tree is 4. What will be the total number of nodes in it?

Select the correct option

- 15
- 16
- 31
- 32

RIZ MUGHAL

R

Question # 5 of 10 (Start time: 10:25:58 AM, 26 August 2020)

Total Mark

For a perfect binary tree of height h , having N nodes, the sum of heights of nodes is _____.

Select the correct option

<input checked="" type="radio"/>	$N - h - 1$
<input type="radio"/>	$N - 1$
<input type="radio"/>	$N - 1 + h$
<input type="radio"/>	$N - (h - 1)$

RIZ MUGHAL

R

Question # 6 of 10 (Start time: 10:26:17 AM, 26 August 2020)

Total M

Which property of equivalence relation is satisfied if we say:
Ahmad is cousin of Ali and Ali is also cousin of Ahmad

Select the correct option

<input type="radio"/>	Reflexivity
<input checked="" type="radio"/>	Symmetry
<input type="radio"/>	Transitivity
<input type="radio"/>	All of the above

Question # 7 of 10 (Start time: 10:26:36 AM, 26 August 2020)

For a perfect binary tree of height 4. What will be the sum of heights of nodes?

Select the correct option

- | | |
|----------------------------------|----|
| <input type="radio"/> | 31 |
| <input type="radio"/> | 30 |
| <input type="radio"/> | 27 |
| <input checked="" type="radio"/> | 26 |
- RIZ MUGHAL R*

Question # 8 of 10 (Start time: 10:26:59 AM, 26 August 2020)

Total

The total number of nodes on 10th level of a perfect binary tree are :

Select the correct option

<input type="radio"/>	256
<input type="radio"/>	512
<input checked="" type="radio"/>	1024
<input type="radio"/>	Can't be determined

RIZ MUGHAL

R

Question # 9 of 10 (Start time: 10:27:17 AM, 26 August 2020)

Total Marks

Heap can be used to implement

Select the correct option

- | | |
|----------------------------------|----------------|
| <input type="radio"/> | Stack |
| <input type="radio"/> | Linked list |
| <input type="radio"/> | Queue |
| <input checked="" type="radio"/> | Priority Queue |

RIZ MUGHAL

Question # 10 of 10 (Start time: 10:27:36 AM, 26 August 2020)

Tot

Which one of the following is NOT the property of equivalence relation?

Select the correct option

<input type="radio"/>	Reflexive
<input type="radio"/>	Symmetric
<input type="radio"/>	Transitive
<input checked="" type="checkbox"/>	Associative

RIZ MUGHAL

R

4th account

Question # 1 of 10 (Start time: 10:57:32 AM, 26 August 2020)

Total

Which property of equivalence relation is satisfied if we say:
Ahmad is cousin of Ali and Ali is also cousin of Ahmad

Select the correct option

<input type="radio"/>	Reflexivity
<input checked="" type="radio"/>	Symmetry
<input type="radio"/>	Transitivity
<input type="radio"/>	All of the above

Question # 2 of 10 (Start time: 10:58:01 AM, 26 August 2020)

Which of the following properties are satisfied by Equivalence relationship?

Select the correct option

<input type="radio"/>	Reflexive , Symmetric
<input checked="" type="radio"/>	Reflexive , Transitive
<input type="radio"/>	Symmetric , transitive
<input type="radio"/>	Reflexive , Symmetric and Transitive

RIZ MUGHAL

R

Question # 3 of 10 (Start time: 10:59:39 AM, 26 August 2020)

A binary relation R over S is called an equivalence relation if it has following property(s)

Select the correct option

<input type="radio"/>	Reflexivity
<input type="radio"/>	Symmetry
<input type="radio"/>	Transitivity
<input checked="" type="checkbox"/>	All of the given options

Question # 4 of 10 (Start time: 11:00:06 AM, 26 August 2020)

For a perfect binary tree of height h , having N nodes, the sum of heights of nodes is _____.

Select the correct option

- | | |
|----------------------------------|---------------|
| <input checked="" type="radio"/> | $N - h - 1$ |
| <input type="radio"/> | $N - 1$ |
| <input type="radio"/> | $N - 1 + h$ |
| <input type="radio"/> | $N - (h - 1)$ |

RIZ MUGHAL

R

Question # 5 of 10 (Start time: 11:00:21 AM, 26 August 2020)

Total

Suppose there are a set of fruits and a set of vegetables. Both sets are _____ sets.

Select the correct option

<input checked="" type="radio"/>	Disjoint
<input type="radio"/>	Subsets
<input type="radio"/>	Whole
<input type="radio"/>	Equal

Question # 6 of 10 (Start time: 11:00:40 AM, 26 August 2020)

To

given the values are the array representation of heap;

12 23 26 31 34 44 56 64 78 100

If we perform 4 deleteMin operations, the last element deleted is _____.

Select the correct option

<input checked="" type="radio"/>	31
<input type="radio"/>	34
<input type="radio"/>	44
<input type="radio"/>	56

Question # 7 of 10 (Start time: 11:00:59 AM, 26 August 2020)

Total M

Which of the following heap method lowers the value of key at position 'p' by the amount 'delta'?

Select the correct option

- | | |
|----------------------------------|------------------------|
| <input type="radio"/> | increaseKey(p,delta) |
| <input checked="" type="radio"/> | decreaseKey(p,delta) |
| <input type="radio"/> | percolateDown(p,delta) |
| <input type="radio"/> | remove(p,delta) |

Question # 8 of 10 (Start time: 11:01:21 AM, 26 August 2020)

Total Marks: 1

If we want to find 3rd minimum element from an array of elements, then after applying buildHeap method, how many times deleteMin method will be called ?

Select the correct option

- | | | |
|----------------------------------|---|----|
| <input type="radio"/> | 1 | // |
| <input type="radio"/> | 2 | // |
| <input checked="" type="radio"/> | 3 | // |
| <input type="radio"/> | 4 | // |

Question # 9 of 10 (Start time: 11:01:43 AM, 26 August 2020)

Total Marks: 1

If we want to find median of 50 elements, then after applying buildHeap method, how many times deleteMin method will be called ?

Select the correct option

- | | | |
|----------------------------------|----|----|
| <input type="radio"/> | 5 | // |
| <input checked="" type="radio"/> | 25 | // |
| <input type="radio"/> | 35 | // |
| <input type="radio"/> | 50 | // |

Question # 10 of 10 (Start time: 11:02:07 AM, 26 August 2020)

The total number of nodes on 5th level of a perfect binary tree are :

Select the correct option

- 16
- 15
- 31
- 32

RIZ MUGHAL

5th account

Question # 1 of 10 (Start time: 11:06:58 AM, 26 August 2020)

T

For a perfect binary tree of height h , having N nodes, the sum of heights of nodes is _____.

Select the correct option

<input checked="" type="checkbox"/>	$N - h - 1$
<input type="checkbox"/>	$N - 1$
<input type="checkbox"/>	$N - 1 + h$
<input type="checkbox"/>	$N - (h - 1)$

Question # 2 of 10 (Start time: 11:07:22 AM, 26 August 2020)

given the values are the array representation of heap;
12 23 26 31 34 44 56 64 78 100
What is the 5th smallest element in the given heap?

Select the correct option

<input type="radio"/>	31
<input checked="" type="radio"/>	34
<input type="radio"/>	44
<input type="radio"/>	56

Question # 3 of 10 (Start time: 11:07:48 AM, 26 August 2020)

Total

Which of the following method is helpful in creating the heap at once?

Select the correct option

<input type="radio"/>	insert
<input type="radio"/>	add
<input type="radio"/>	update
<input checked="" type="checkbox"/>	percolateDown

Question # 4 of 10 (Start time: 11:08:11 AM, 26 August 2020)

Total Mark

The total number of nodes on 10th level of a perfect binary tree are :

Select the correct option

<input type="radio"/>	256
<input type="radio"/>	512
<input checked="" type="radio"/>	1024
<input type="radio"/>	Can't be determined

Question # 5 of 10 (Start time: 11:08:37 AM, 26 August 2020)

Total Marks:

Which of the following heap method lowers the value of key at position 'p' by the amount 'delta'?

Select the correct option

- | | |
|----------------------------------|------------------------|
| <input type="radio"/> | increaseKey(p,delta) |
| <input checked="" type="radio"/> | decreaseKey(p,delta) |
| <input type="radio"/> | percolateDown(p,delta) |
| <input type="radio"/> | remove(p,delta) |

RIZ MUGHAL

R

Question # 6 of 10 (Start time: 11:09:00 AM, 26 August 2020)

The expression
if (! heap->isEmpty())
checks

Select the correct option


<input type="radio"/>	Heap is empty
<input type="radio"/>	Heap is full
<input checked="" type="radio"/>	Heap is not empty
<input type="radio"/>	Not a valid expression

Question # 7 of 10 (Start time: 11:09:34 AM, 26 August 2020)

Total

Which of the following properties are satisfied by Equivalence relationship?

Select the correct option

- | | |
|----------------------------------|--------------------------------------|
| <input type="radio"/> | Reflexive , Symmetric |
| <input type="radio"/> | Reflexive , Transitive |
| <input type="radio"/> | Symmetric , transitive |
| <input checked="" type="radio"/> | Reflexive , Symmetric and Transitive |
- RIZ MUGHAL
- 

Question # 8 of 10 (Start time: 11:09:55 AM, 26 August 2020)

Total Mark

given the values are the array representation of heap:

12 23 26 31 34 44 56 64 78 100

If we perform 4 deleteMin operations, the last element deleted is _____.

Select the correct option

- | | |
|----------------------------------|----|
| <input checked="" type="radio"/> | 31 |
| <input type="radio"/> | 34 |
| <input type="radio"/> | 44 |
| <input type="radio"/> | 56 |

Question # 9 of 10 (Start time: 11:10:20 AM, 26 August 2020)

Total

For a perfect binary tree of height 4. What will be the sum of heights of nodes?

Select the correct option

- | | |
|----------------------------------|----|
| <input type="radio"/> | 31 |
| <input type="radio"/> | 30 |
| <input type="radio"/> | 27 |
| <input checked="" type="radio"/> | 26 |

Question # 10 of 10 (Start time: 11:10:44 AM, 26 August 2020)

Total Mark

If ahmad is boss of ehsan and ehsan is boss of umer then ahmad is also boss of umer.
The above mentioned relation is _____.

Select the correct option

<input type="radio"/>	Reflexive
<input type="radio"/>	Symmetry
<input checked="" type="radio"/>	Transitive
<input type="radio"/>	None of given