

SOHAIL ZUBAIR

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CS301 DATA STRUCTURE SOLUTION FILE ON 17-07-2020



CS301:Grand Quiz

Quiz Start Time: 01:06 AM, 17 July 2020

Question # 1 of 30 (Start time: 01:06:54 AM, 17 July 2020)

Total Marks: 1

Each operator in a postfix expression refers to the previous _____ operand(s).

Select the correct option

- one
- two 
- three
- four


Click to Save Answer & Move to Next Question

Question # 7 of 30 (Start time: 01:12:20 AM, 17 July 2020)

Total Marks: 1

In the calling function, after the execution of the function called, the program continues its execution from the _____ after the function call.

Select the correct option

- | | |
|-----------------------|---|
| <input type="radio"/> | Previous line |
| <input type="radio"/> | Next line  |
| <input type="radio"/> | Beginning |
| <input type="radio"/> | None of the above |

[Click to save Answer & Move to Next Question](#)

SOHA

dequeue() operation of queue data structure is used to

Select the correct option

- get an element from the front of the queue
- remove an element from the front and return it
- insert an element at the front
- insert an element at the back

Click to Save Answer & Move to Next Question

SOH

Question # 30 of 30 (Start time: 01:31:41 AM, 17 July 2020)

Total Marks: 1

Consider we have performed the following operations on a stack of size 5.

```
Push(10);
```

```
Push(20);
```

```
Push(30);
```

```
Pop();
```

```
Pop();
```

Select the correct option

<input type="radio"/>	10
<input type="radio"/>	20
<input checked="" type="radio"/>	40 
<input type="radio"/>	50

SOHAIL


Question # 30 of 30 (Start time: 01:31:41 AM, 17 July 2020)

Total Marks: 1

```
Pop();  
Push(40);  
Push(50);  
Pop();
```

After the completion of all operation, the top element in stack is _____.

Select the correct option

<input type="radio"/>	10
<input type="radio"/>	20
<input checked="" type="radio"/>	40 
<input type="radio"/>	50

[Click to save Answer & Move to Next Question](#)

SOH

Question # 12 of 30 (Start time: 01:17:58 AM, 17 July 2020)

Total Marks: 1

For making Binary Search Tree for Strings we need, _____ data type.

Select the correct option

<input type="radio"/>	char
<input type="radio"/>	int
<input type="radio"/>	float
<input type="radio"/>	double

[Click to Save Answer & Move to Next Question](#)


SOFT

Question # 6 of 30 (Start time: 01:11:26 AM, 17 July 2020)

Total Marks: 1

Factorial is an example of _____function.

Select the correct option

<input type="radio"/>	Recursive	
<input type="radio"/>	Non-Recursive	
<input type="radio"/>	Cube	
<input type="radio"/>	Log	

[Click to Save Answer & Move to Next Question](#)


SU

Question # 29 of 30 (Start time: 01:31:05 AM, 17 July 2020)

Total Marks: 1

_____ tree has been named after two persons Adelson-Velskii and Landis.

Select the correct option

- Binary
- Black
- AVL 
- VLA

[Click to Save Answer & Move to Next Question](#)

SOF

Question # 26 of 30 (Start time: 01:28:56 AM, 17 July 2020)

Total Marks: 1

next() method of List class is used to:

Select the correct option

- Moves the current position backward one element
- Moves the "current" pointer to two steps after the last element of the array
- Moves the current position forward one element
- Moves the "current" pointer to two steps before the last element of the array

[Click to save Answer & Move to Next Question](#)


SOF

Question # 21 of 30 (Start time: 01:24:36 AM, 17 July 2020)

Total Marks: 1

The depth of a binary tree is

Select the correct option

- Total number of nodes in the tree
- Number of leaf nodes in the tree
- Number of non-leaf nodes in the tree
- Maximum level of a leaf 

[Click to Show Answer & Move to Next Question](#)


SUN

Question # 14 of 30 (Start time: 01:19:48 AM, 17 July 2020)

Total Marks: 1

In doubly linked list a node consists of three parts:

Select the correct option

- | | |
|-----------------------|--|
| <input type="radio"/> | 1 pointer and 2 objects |
| <input type="radio"/> | 2 pointers and 1 object  |
| <input type="radio"/> | 3 objects |
| <input type="radio"/> | 3 pointers |

Click to Save Answer & Move to Next Question


SU

Question # 22 of 30 (Start time: 01:25:39 AM, 17 July 2020)

Total Marks: 1

Local variables of a function are stored in,

Select the correct option

<input type="radio"/>	Binary Search Tree
<input checked="" type="radio"/>	Stack 
<input type="radio"/>	Queue
<input type="radio"/>	AVL Tree

[Click to Save Answer & Move to Next Question](#)


SOHRA

Question # 3 of 30 (Start time: 01:08:57 AM, 17 July 2020)

Total Marks: 1

A _____ model attempts to model a real-world phenomenon

Select the correct option

<input type="radio"/>	Physical
<input type="radio"/>	Logical
<input type="radio"/>	Simulation 
<input type="radio"/>	Conceptual

SOHAIL

Question # 16 of 30 (Start time: 01:21:17 AM, 17 July 2020)

Total Marks: 1

Which operation of queue data structure is used to insert an element into the Queue?

Select the correct option

- | | |
|-----------------------|-------------|
| <input type="radio"/> | enqueue() ← |
| <input type="radio"/> | dequeue() |
| <input type="radio"/> | front() |
| <input type="radio"/> | remove() |

[Click to have Answer & Move to Next Question](#)


SOHR

Question # 17 of 30 (Start time: 01:21:49 AM, 17 July 2020)

Total Marks: 1

Which of the following data structure is linear type?

Select the correct option

- | | |
|-----------------------|--|
| <input type="radio"/> | Stack |
| <input type="radio"/> | List |
| <input type="radio"/> | Queue |
| <input type="radio"/> | All of above  |

[Click to Save Answer & Move to Next Question](#)

SOF

Question # 9 of 30 (Start time: 01:13:58 AM, 17 July 2020)

Total Marks: 1

One should be careful about transient _____ that are stored by reference in data structures.

Select the correct option

- | | | |
|-----------------------|----------|---|
| <input type="radio"/> | objects |  |
| <input type="radio"/> | stack | |
| <input type="radio"/> | function | |
| <input type="radio"/> | tree | |

[Click to Show Answer & Move to Next Question](#)

SOHA

Question # 2 of 30 (Start time: 01:08:03 AM, 17 July 2020)

Total Marks: 1

In level-order traversal for Binary Search Tree, we visit the nodes at each level before proceeding to the next level, in a _____ order.

Select the correct option

- | | |
|-----------------------|---|
| <input type="radio"/> | right-to-left |
| <input type="radio"/> | left-to-right  |
| <input type="radio"/> | top-to-bottom |
| <input type="radio"/> | bottom-to-top |

[Click to Save Answer & Move to Next Question](#)

SOF


Question # 13 of 30 (Start time: 01:18:34 AM, 17 July 2020)

Total Marks: 1

```
int htdiff = height(root->getLeft()) _____ height(root->getRight());
```

The above line of code is taken from AVL insert method. Complete it by selecting an appropriate symbol.

Select the correct option

<input type="radio"/>	-	
<input type="radio"/>	+	
<input type="radio"/>	/	
<input type="radio"/>	*	

[Click to save Answer & Move to Next Question](#)

SOH

Question # 11 of 30 (Start time: 01:17:06 AM, 17 July 2020)

Total Marks: 1

Last node in circular linked list contains

Select the correct option



At least one null pointer



No null pointer



Maximum two null pointers



None of the given


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Question # 24 of 30 (Start time: 01:27:13 AM, 17 July 2020)

Total Marks: 1

Every _____ tree is a binary search tree.

Select the correct option

- | | |
|-----------------------|---|
| <input type="radio"/> | AVL  |
| <input type="radio"/> | binary |
| <input type="radio"/> | big |
| <input type="radio"/> | small |

[Click to Save Answer & Move to Next Question](#)

Question # 5 of 30 (Start time: 01:10:08 AM, 17 July 2020)

Total Marks: 1

In-order traversal method traverses the data in

Select the correct option

- | | |
|-----------------------|-------------------|
| <input type="radio"/> | Non sorted order |
| <input type="radio"/> | Random order |
| <input type="radio"/> | Sorted order ← |
| <input type="radio"/> | None of the given |

Click to Save Answer & Move to Next Question

SOHA

Question # 28 of 30 (Start time: 01:30:31 AM, 17 July 2020)

Total Marks: 1

Which one of the following calling method does not change the original value of the argument in the calling function?

Select the correct option

- | | |
|-----------------------|---|
| <input type="radio"/> | Call by passing reference of the argument |
| <input type="radio"/> | Call by passing the address of the argument |
| <input type="radio"/> | Call by passing the value of the argument |
| <input type="radio"/> | None of the given options |

SOHAN

Question # 4 of 30 (Start time: 01:09:26 AM, 17 July 2020)

Total Marks: 1

The balance of a node in a binary tree is defined as the height of its _____ sub tree minus height of its right sub tree.

Select the correct option

- right
- left 
- upper
- lower

[Click to save Answer & Move to Next Question](#)


SOHA

Question # 25 of 30 (Start time: 01:27:56 AM, 17 July 2020)

Total Marks: 1

When an executable program runs, it is loaded in the computer memory and becomes a_____.

Select the correct option

- | | |
|-----------------------|---|
| <input type="radio"/> | Thread |
| <input type="radio"/> | .h file |
| <input type="radio"/> | Process  |
| <input type="radio"/> | None of the above |

[Click to save Answer & Move to Next Question](#)


SOFT

Question # 15 of 30 (Start time: 01:20:32 AM, 17 July 2020)

Total Marks: 1

Binary Search Tree violates the condition of AVL tree when any node has balance equal to

Select the correct option

- 2 or -2 
- 1 or -1
- 0
- None of the options.

[Click to save Answer & Move to Next Question](#)

SOHR

Question # 23 of 30 (Start time: 01:26:35 AM, 17 July 2020)

Total Marks: 1

All the objects created using _____ operator have to be explicitly destroyed using the delete operator.

Select the correct option

<input type="radio"/>	new	
<input type="radio"/>	delete	
<input type="radio"/>	del	
<input type="radio"/>	create	

[Click to Save Answer & Move to Next Question](#)


SOHR

Question # 19 of 30 (Start time: 01:22:58 AM, 17 July 2020)

Total Marks: 1

Which of the following operation returns but do not removes top value of the stack?

Select the correct option

- | | |
|----------------------------------|---|
| <input type="radio"/> | push |
| <input type="radio"/> | pop |
| <input checked="" type="radio"/> | top  |
| <input type="radio"/> | first |

[Click to view Answer & Move to Next Question](#)

SOF

Question # 10 of 30 (Start time: 01:15:06 AM, 17 July 2020)

Total Marks: 1

In case of insertion of left outer node in BST,

Select the correct option

- we apply single right rotation to make it AVL Tree.
- we apply single left rotation to make it AVL Tree.
- we first apply right rotation and then left rotation to make it AVL Tree.
- we first apply left rotation and then right rotation to make it AVL Tree.

[Click to Show Answer & Move to Next Question](#)


Soft

Question # 20 of 30 (Start time: 01:23:57 AM, 17 July 2020)

Total Marks: 1

Local variables defined inside function body are _____ automatically at the end of function execution.

Select the correct option


<input type="radio"/>	created
<input type="radio"/>	destroyed 
<input type="radio"/>	incremented
<input type="radio"/>	decremented

[Click to Save Answer & Move to Next Question](#)

SOHA

The lifetime of a transient object cannot exceed that of the application.

Select the correct option

- True 
- False
- In some cases
- None of the given

Click to Save Answer & Move to Next Question

SOH

Question # 27 of 30 (Start time: 01:29:43 AM, 17 July 2020)

Total Marks: 1

If both left and right nodes of a node are NULL then this type of node is called a _____ node.

Select the correct option

<input type="radio"/>	Non leaf
<input type="radio"/>	Internal
<input type="radio"/>	Inner
<input type="radio"/>	Leaf 


[Click to view Answer / Move to Next Question](#)

SOHA

Question # 29 of 30 (Start time: 01:02:38 AM, 17 July 2020)

If a node has three fields, then this node will be related to

Select the correct option

- | | |
|-----------------------|--|
| <input type="radio"/> | Linked list |
| <input type="radio"/> | Doubly linked list  |
| <input type="radio"/> | Circular linked list |
| <input type="radio"/> | All of the given |

SOHAIL

Question # 20 of 30 (Start time: 12:54:25 AM, 17 July 2020)

A kind of expressions where the operator is present between two operands called _____ expressions.

Select the correct option

<input type="radio"/>	Infix
<input type="radio"/>	Postfix
<input type="radio"/>	Prefix
<input type="radio"/>	None of the above




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Question # 23 of 30 (Start time: 12:56:17 AM, 17 July 2020)

In internal memory organization of a process, there is some area of memory for static data that holds _____ variables.

Select the correct option

- | | |
|-----------------------|---------------------------|
| <input type="radio"/> | Static |
| <input type="radio"/> | Global |
| <input type="radio"/> | Not static neither global |
| <input type="radio"/> | Both static and global |
- 

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Question # 25 of 30 (Start time: 12:58:40 AM, 17 July 2020)

In which traversal method, the recursive calls can be used to traverse a binary tree ?

Select the correct option

- | | |
|-----------------------|-----------------------------|
| <input type="radio"/> | In preorder traversal only |
| <input type="radio"/> | In inorder traversal only |
| <input type="radio"/> | In postorder traversal only |
| <input type="radio"/> | All of the given options |




SOHAN

Question # 2 of 30 (Start time: 12:35:47 AM, 17 July 2020)

A _____ model attempts to model a real-world phenomenon

Select the correct option

<input type="radio"/>	Physical
<input type="radio"/>	Logical
<input type="radio"/>	Simulation 
<input type="radio"/>	Conceptual

SOHAIL ZUBAIR

Question # 13 of 30 (Start time: 12:46:50 AM, 17 July 2020)

Allocating and de-allocating memory for linked list nodes does take _____ time than pre-allocated array.

Select the correct option


- | | |
|----------------------------------|-------|
| <input type="radio"/> | Less |
| <input checked="" type="radio"/> | More |
| <input type="radio"/> | Equal |
| <input type="radio"/> | No |

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Question # 5 of 30 (Start time: 12:38:49 AM, 17 July 2020)

_____ objects (objects accessed by pointers) are called anonymous objects.

Select the correct option

- | | |
|-----------------------|--|
| <input type="radio"/> | private |
| <input type="radio"/> | Nameless  |
| <input type="radio"/> | Friend |
| <input type="radio"/> | public |

SOHAIL ZUBI

Question # 19 of 30 (Start time: 12:53:31 AM, 17 July 2020)

To represent hierarchical relationship between elements, which data structure is suitable?

Select the correct option

<input type="radio"/>	Dequeue
<input type="radio"/>	Priority
<input type="radio"/>	Stack
<input type="radio"/>	Tree



SOHAIL Z...

Question # 22 of 30 (Start time: 12:55:43 AM, 17 July 2020)

A binary tree whose every node has either zero or two children is called _____

Select the correct option

- | | |
|-----------------------|----------------------|
| <input type="radio"/> | Complete binary tree |
| <input type="radio"/> | Binary search tree |
| <input type="radio"/> | Strictly binary tree |
| <input type="radio"/> | None of above |



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_____ is an area in computer memory that is allocated dynamically.

Select the correct option

<input type="radio"/>	Heap
<input type="radio"/>	Stack
<input type="radio"/>	Queue
<input type="radio"/>	Linked List



SOHAIL ZU

Question # 17 of 30 (Start time: 12:51:04 AM, 17 July 2020)

In a tree, we link the nodes in such a way that it _____ a linear structure.

Select the correct option

- | | |
|-----------------------|-----------------|
| <input type="radio"/> | does not remain |
| <input type="radio"/> | forms |
| <input type="radio"/> | reverses |
| <input type="radio"/> | remains |



SOHAIL

Question # 4 of 30 (Start time: 12:37:55 AM, 17 July 2020)

The -- is a decrement operator in C++ that decreases the value of the operand by _____

Select the correct option

- | | |
|-----------------------|-------|
| <input type="radio"/> | One |
| <input type="radio"/> | Two |
| <input type="radio"/> | Three |
| <input type="radio"/> | Four |



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