



01 : 59 : 51



Exit

**Choose the correct option. (0.5 Marks)**

Q1 / 80

Each node in a linked list has two pairs of .....and

.....

**OPTIONS**

Address field and link field

Avail field and information field

Link field and avail field

Link field and information field

**SKIP****SUBMIT ANSWER**



01 : 59 : 47



Exit

**Choose the correct option. (0.5 Marks)**

Q2 / 80

Which of the following sorting algorithm is of divide and conquer type?

**OPTIONS**

Bubble

Heap

Merge

Selection

**SKIP****SUBMIT ANSWER**



01 : 59 : 45



Exit

**Choose the correct option. (0.5 Marks)**

Q3 / 80

The complexity of searching an element from a set of n elements using Binary search algorithm is

**OPTIONS****O(log n)****O(n log n)****O(n)****O(n^2)****SKIP****SUBMIT ANSWER**



01 : 59 : 38



Exit

**Choose the correct option. (0.5 Marks)**

Q4 / 80

The memory address of the first element of an array is called

**OPTIONS**

base address

first address

floor address

foundation address

**SKIP****SUBMIT ANSWER**



01 : 59 : 36



Exit

**Choose the correct option. (0.5 Marks)**

Q5 / 80

Finding the location of the element with a given value is:

**OPTIONS**

Search

Sort

Traversal

None of above

**SKIP****SUBMIT ANSWER**



01 : 59 : 32



Exit

**Choose the correct option. (0.5 Marks)**

Q6 / 80

The smallest element of an array's index is called its

**OPTIONS**

extraction

lower bound

upper bound

RANGE

**SKIP****SUBMIT ANSWER**



01 : 59 : 30



Exit

**Choose the correct option. (0.5 Marks)**

Q7 / 80

An array elements are always stored in \_\_\_\_\_  
memory locations.

**OPTIONS**

Random

Sequential

Sequential and Random

None

**SKIP****SUBMIT ANSWER**



01 : 59 : 28



Exit

**Choose the correct option. (0.5 Marks)**

Q8 / 80

When does top value of the stack changes?

**OPTIONS**

After deletion

At the time of deletion

Before deletion

While checking underflow

**SKIP****SUBMIT ANSWER**



01 : 59 : 25



Exit

**Choose the correct option. (0.5 Marks)**

Q9 / 80

What is meaning of following declaration ? int arr[20];

**OPTIONS**

Array of Size 20

Array of size 20 that can have integer address

Integer Array of size 20

None of these

**SKIP****SUBMIT ANSWER**



01 : 59 : 23



Exit

**Choose the correct option. (0.5 Marks)**

Q10 / 80

The complexity of bubble sort algorithm is ....

**OPTIONS****O(logn)****O(n logn)****O(n)****O(n^2)****SKIP****SUBMIT ANSWER**



01 : 59 : 21



Exit

**Choose the correct option. (0.5 Marks)**

Q11 / 80

If the sequence of operations (push(1), push(2), pop, push(1), push(2), pop, pop, pop, push(2), pop), are performed on a stack, the sequence of popped out values are \_\_\_\_.

**OPTIONS**

2, 2, 1, 1, 2

2, 2, 1, 2, 2

2, 1, 2, 2, 1

2, 1, 2, 2, 2

**SKIP****SUBMIT ANSWER**



01 : 59 : 20



Exit

**Choose the correct option. (0.5 Marks)**

Q12 / 80

Which data structure is needed to convert infix notation to postfix notation?

**OPTIONS**

Stack

Queue

Array

None

**SKIP****SUBMIT ANSWER**



01 : 59 : 18



Exit

**Choose the correct option. (0.5 Marks)**

Q13 / 80

The data structure required to evaluate a postfix expression is \_\_\_\_.

**OPTIONS**

Stack

Queue

Array

None

**SKIP****SUBMIT ANSWER**



01 : 59 : 16



Exit

**Choose the correct option. (0.5 Marks)**

Q14 / 80

What is the value of the postfix expression  $6\ 3\ 2\ 4\ +\ -\ *$

**OPTIONS**

18

-18

15

Invalid Expression

**SKIP****SUBMIT ANSWER**



01 : 59 : 14



Exit

**Choose the correct option. (0.5 Marks)**

Q15 / 80

Which of the following is an advantage of adjacency list representation over adjacency matrix representation of a graph?

**OPTIONS**

In adjacency list representation, space is saved for sparse graphs.

DFS and BSF can be done in  $O(V + E)$  time for adjacency list representation. These operations take  $O(V^2)$  time in adjacency matrix representation. Here  $V$  and  $E$  are number of vertices and edges respectively.

Adding a vertex in adjacency list representation is easier than adjacency matrix representation.

All of the above

**SKIP****SUBMIT ANSWER**



01 : 59 : 12



Exit

**Choose the correct option. (0.5 Marks)**

Q16 / 80

The postfix equivalent of the infix expression

$a+b/c-d*e-f$  is \_\_\_\_.

**OPTIONS**

abc/+de\*-f-

abcd\*+/ef-/

ab+cd\*/ef/-

abc/d\*+ef/-

**SKIP****SUBMIT ANSWER**



01 : 59 : 06



Exit

**Choose the correct option. (0.5 Marks)**

Q17 / 80

Queues and Stacks can be implemented using either arrays or linked lists.

**OPTIONS**

true

false

**SKIP****SUBMIT ANSWER**



01 : 59 : 04



Exit

**Choose the correct option. (0.5 Marks)**

Q18 / 80

In the linked list implementation of the stack, where does the push method place the new entry on the linked list?

**OPTIONS**

Before the first node

At end

After all other entries that are greater than the new entry.

After all other entries that are smaller than the new entry.

**SKIP****SUBMIT ANSWER**



01 : 59 : 03



Exit

**Choose the correct option. (0.5 Marks)**

Q19 / 80

A linear list of elements in which deletion can be done from one end (front) and insertion can take place only at the other end (rear) is known as a \_\_\_\_.

**OPTIONS**

Stack

Queue

Array

None

**SKIP****SUBMIT ANSWER**



01 : 59 : 01



Exit

**Choose the correct option. (0.5 Marks)**

Q20 / 80

Items can be removed from both ends of \_\_\_\_\_

**OPTIONS**

Stack

Queue

Array

Dequeue

**SKIP****SUBMIT ANSWER**



01 : 58 : 59



Exit

**Choose the correct option. (0.5 Marks)**

Q21 / 80

The postfix equivalent of the infix expression  $a+b+c+d$  is \_\_\_\_.

**OPTIONS**

abcd+++

ab+c+d+

ab+cd++

(a-b)\*(c+d)

**SKIP****SUBMIT ANSWER**



01 : 58 : 57



Exit

**Choose the correct option. (0.5 Marks)**

Q22 / 80

The postfix equivalent of the infix expression

$a+b/c*d-e/f$  is \_\_\_\_.

**OPTIONS**

ab+cd\*/ef-/

abcd\*+/ef-/-

ab+cd\*/ef/-

abc/d\*+ef/-

**SKIP****SUBMIT ANSWER**



01 : 58 : 11



Exit

**Choose the correct option. (0.5 Marks)**

Q23 / 80

Which data structure allows deleting data elements from front and inserting at rear?

**OPTIONS**

Stack

Queue

Array

Dequeue

**SKIP****SUBMIT ANSWER**



01 : 58 : 09



Exit

**Choose the correct option. (0.5 Marks)**

Q24 / 80

If we have implemented the queue with a linked list, keeping track of a front node and a rear node with two reference variables. Which of these reference variables will change during deletion into NONEMPTY queue?

**OPTIONS**

Neither Change

Only Front changes

Only Rear Changes

None

**SKIP****SUBMIT ANSWER**



01 : 58 : 07



Exit

**Choose the correct option. (0.5 Marks)**

Q25 / 80

In order to input a list of values and output them in opposite order, you could use a Stack.

**OPTIONS**

true

false

**SKIP****SUBMIT ANSWER**



01 : 58 : 05



Exit

**Choose the correct option. (0.5 Marks)**

Q26 / 80

How many nodes does a complete binary tree of level 5 have?

**OPTIONS**

15

16

31

32

**SKIP****SUBMIT ANSWER**



01 : 57 : 59



Exit

**Choose the correct option. (0.5 Marks)**

Q29 / 80

In Binary trees nodes with no successor are called .....

**OPTIONS**

Last node

Final Nodes

Terminal Node

None of these

**SKIP****SUBMIT ANSWER**



01 : 58 : 03



Exit

**Choose the correct option. (0.5 Marks)**

Q27 / 80

Which of the following scenarios leads to linear running time for a random search hit in a linear-probing hash table?

**OPTIONS**

All keys hash to an even-numbered index

All keys hash to different even-numbered indices

All keys hash to same index

None of these

**SKIP****SUBMIT ANSWER**



01 : 58 : 01



Exit

**Choose the correct option. (0.5 Marks)**

Q28 / 80

What would be the depth of tree whose level is 9?

**OPTIONS**

10

11

9

None of these

**SKIP****SUBMIT ANSWER**



01 : 57 : 57



Exit

**Choose the correct option. (0.5 Marks)**

Q30 / 80

TREE[1]=NULL indicates tree is .....

**OPTIONS**

Empty

Full

Overflow

UnderFlow

**SKIP****SUBMIT ANSWER**



01 : 57 : 55



Exit

**Choose the correct option. (0.5 Marks)**

Q31 / 80

In a max-heap, element with the greatest key is always in the which node?

**OPTIONS**

Leaf node

First node of left sub tree

root node

First node of right sub tree

**SKIP****SUBMIT ANSWER**



01 : 57 : 53



Exit

**Choose the correct option. (0.5 Marks)**

Q32 / 80

Heap exhibits the property of a binary tree?

**OPTIONS**

YES

NO

**SKIP****SUBMIT ANSWER**



01 : 57 : 52



Exit

**Choose the correct option. (0.5 Marks)**

Q33 / 80

What does the following piece of code do?

```
public void func(Tree root)
{
    func(root.left());
    func(root.right());
    System.out.println(root.data()); }
```

**OPTIONS**

Preorder traversal

Postorder traversal

Inorder traversal

Level Order Traversal

**SKIP****SUBMIT ANSWER**



01 : 57 : 50



Exit

**Choose the correct option. (0.5 Marks)**

Q34 / 80

What is an AVL tree?

**OPTIONS**

a tree which is balanced and is a height balanced tree

a tree which is unbalanced and is a height balanced tree

a tree with three children

a tree with atmost 3 children

**SKIP****SUBMIT ANSWER**



01 : 57 : 48



Exit

**Choose the correct option. (0.5 Marks)**

Q35 / 80

Why we need to a binary tree which is height balanced?

**OPTIONS**

to avoid formation of skew trees

to save memory

to attain faster memory access

to simplify storing

**SKIP****SUBMIT ANSWER**



01 : 57 : 09



Exit

**Choose the correct option. (0.5 Marks)**

Q36 / 80

What is a complete binary tree?

**OPTIONS**

Each node has exactly zero or two children

A binary tree, which is completely filled, with the possible exception of the bottom level, which is filled from right to left

A binary tree, which is completely filled, with the possible exception of the bottom level, which is filled from left to right

A tree In which all nodes have degree 2

**SKIP****SUBMIT ANSWER**



01 : 57 : 02



Exit

**Choose the correct option. (0.5 Marks)**

Q37 / 80

The number of edges from the root to the node is called \_\_\_\_\_ of the tree.

**OPTIONS**

Height

Depth

length

width

**SKIP****SUBMIT ANSWER**



01 : 57 : 00



Exit

**Choose the correct option. (0.5 Marks)**

Q38 / 80

Trees are said ..... if they are similar and have same contents at corresponding nodes.

**OPTIONS**

Carbon Copy

copies

duplicate

replica

**SKIP****SUBMIT ANSWER**



01 : 56 : 58



Exit

**Choose the correct option. (0.5 Marks)**

Q39 / 80

What is the speciality about the inorder traversal of a binary search tree?

**OPTIONS**

It traverses in a non increasing order

It traverses in an increasing order

It traverses in a random fashion

It traverses based on priority of the node

**SKIP****SUBMIT ANSWER**



01 : 56 : 56



Exit

**Choose the correct option. (0.5 Marks)**

Q40 / 80

To restore the AVL property after inserting a element, we start at the insertion point and move towards root of that tree. is this statement true?

**OPTIONS**

true

false

**SKIP****SUBMIT ANSWER**



01 : 56 : 53



Exit



Information

Question

Q41 / 80



## PASSAGE

Consider below written algorithm and answer the questions accordingly

- [1] If FRONT = NULL then Print: Underflow and Exit
- [2] Set ITEM = QUEUE[FRONT]
- [3] If FRONT = REAR then  
Set FRONT = NULL and REAR = NULL  
Else If FRONT = N then  
Set FRONT = 1  
Else  
Set FRONT = FRONT + 1
- [4] Exit

SKIP

SUBMIT ANSWER



01:56:10



Exit



Information

Question

Q41 / 80



## PASSAGE

Consider below written algorithm and answer the questions accordingly

- [1] If FRONT = NULL then Print: Underflow and Exit
- [2] Set ITEM = QUEUE[FRONT]
- [3] If FRONT = REAR then  
Set FRONT = NULL and REAR = NULL  
Else If FRONT = N then  
Set FRONT = 1  
Else  
Set FRONT = FRONT + 1
- [4] Exit

SKIP

SUBMIT ANSWER



01 : 56 : 08



Exit



Information

Question

Q41 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

What does IF condition of STEP 3 in given algorithm tells?

**OPTIONS**

Queue Intially had only one element

Queue Intially was empty

Queue intially was full

None of these

**SKIP****SUBMIT ANSWER**



01 : 56 : 06



Exit



Information

Question

Q42 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Which statement in the given algorithm check whether the queue is empty ?

**OPTIONS**

Step 1

Step 2

Step 3

Step 4

**SKIP****SUBMIT ANSWER**



01 : 56 : 00



Exit



Information

Question

Q43 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

In which type of Queue, STEP 2 and ELSE statement of algorithm will be executed.

### OPTIONS

Circular Queue

Linear Queue

All type of Queue

None of these

SKIP

SUBMIT ANSWER



01 : 55 : 58



Exit



Information

Question

Q44 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

In which type of Queue, STEP 3 and ELSE IF statement of algorithm will be executed.

**OPTIONS**

Circular Queue

Linear Queue

All type of Queue

None of these

SKIP

SUBMIT ANSWER



01 : 55 : 55



Exit



Information

Question

Q45 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

What will Step 2 in the Algorithm do?

### OPTIONS

Insert ITEM in the Queue

Delete ITEM from the Queue

Will assign FRONT value of Queue to ITEM

None of these

SKIP

SUBMIT ANSWER



01 : 55 : 52



Exit



Information

Question

Q46 / 80



## PASSAGE

A company contains a membership file which contains following information about the employees in the company: **Name, Address, Phone No, Age, Sex**

SKIP

SUBMIT ANSWER



01:55:16



Exit



Information

Question

Q46 / 80



## PASSAGE

A company contains a membership file which contains following information about the employees in the company: **Name, Address, Phone No, Age, Sex**

SKIP

SUBMIT ANSWER



01 : 55 : 12



Exit



Information

Question

Q47 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Suppose the company wants to invite only one specific employees in a meetings, what is the operation that will be performed on the membership file for same?

**OPTIONS**

Traversal

Searching

Insertion

Deletion

**SKIP****SUBMIT ANSWER**



01 : 55 : 08



Exit



Information

Question

Q48 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Suppose a new employee joins the company, what operation will be performed in membership file?

**OPTIONS**

Traversal

Searching

Insertion

Deletion

**SKIP****SUBMIT ANSWER**



01 : 55 : 05



Exit



Information

Question

Q49 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Suppose an existing employee moves to a new home, what will happen with the membership file?

**OPTIONS**

Updation

Searching

Insertion

Deletion

**SKIP****SUBMIT ANSWER**



01 : 55 : 15



Exit



Information

Question

Q46 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Suppose an employee exits/ resigns from the company, what operation will be performed on membership file.

**OPTIONS**

Traversal

Searching

Insertion

Deletion

**SKIP****SUBMIT ANSWER**



01 : 55 : 03



Exit



Information

Question

Q50 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Suppose the company wants to invite all employees in a meetings, what is the operation that will be performed on the membership file for same?

**OPTIONS**

Traversal

Searching

Insertion

Deletion

**SKIP****SUBMIT ANSWER**



01:55:01



Exit



Information

Question

Q51 / 80



## PASSAGE

Consider the below mentioned piece of code and answer the questions accordingly:

Step 1: IF TREE = NULL

Allocate memory for TREE

SET TREE -> DATA = ITEM

SET TREE -> LEFT = TREE -> RIGHT = NULL

ELSE

IF ITEM < TREE -> DATA

Insert(TREE -> LEFT, ITEM)

ELSE

Insert(TREE -> RIGHT, ITEM)

[END OF IF]

[END OF IF]

Step 2: END

SKIP

SUBMIT ANSWER



01 : 54 : 31



Exit



Information

Question

Q51 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

What will be the next course of action if Tree is NULL?

**OPTIONS**

Memory Allocation for tree wil be done

Exit the algorithm

Can not say anything

Both 1 and 2

**SKIP****SUBMIT ANSWER**



01 : 54 : 28



Exit



Information

Question

Q52 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

As per the algorithm, if ITEM is GREATER than that of Tree Data, it will be inserted in \_\_\_\_\_ subtree.

**OPTIONS**

Left

Right

Can not say anything

Both 1 and 2

**SKIP****SUBMIT ANSWER**



01 : 54 : 19



Exit



Information

Question

Q53 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

As per the algorithm, if ITEM is less than that of Tree Data, it will be inserted in \_\_\_\_\_ subtree.

**OPTIONS**

Left

Right

Can not say anything

Both 1 and 2

**SKIP****SUBMIT ANSWER**



01 : 54 : 24



Exit



Information



Question

Q53 / 80



## PASSAGE

Consider the below mentioned piece of code and answer the questions accordingly:

Step 1: IF TREE = NULL

    Allocate memory for TREE

    SET TREE -> DATA = ITEM

    SET TREE -> LEFT = TREE -> RIGHT = NULL

    ELSE

        IF ITEM < TREE -> DATA

            Insert(TREE -> LEFT, ITEM)

        ELSE

            Insert(TREE -> RIGHT, ITEM)

        [END OF IF]

    [END OF IF]

Step 2: END

**Skip****Submit Answer**



01 : 53 : 57



Exit



Information

Question

Q54 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

The algorithm given is represents \_\_\_\_ operation on tree

**OPTIONS**

Insert

Delete

Search

None of these

**SKIP****SUBMIT ANSWER**



01 : 53 : 45



Exit



Information

Question

Q55 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

The given algorithm is representing :

**OPTIONS**

Binary Search Tree

AVL Tree

B+ Tree

Both 1 and 2

**SKIP****SUBMIT ANSWER**



01 : 53 : 31



Exit



Information

Question

Q56 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Level order traversal of a rooted tree can be done by starting from the root and performing

### OPTIONS

PREORDER TRAVERSAL

INORDER TRAVERSAL

DEPTH FIRST SEARCH

BREADTH FIRST SEARCH

SKIP

SUBMIT ANSWER



01 : 53 : 28



Exit



Information

Question

Q57 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

PREORDER TRAVERSAL follows:

### OPTIONS

Left, Node, Right

Node, Left, right

Left, Right, Node

None of these

SKIP

SUBMIT ANSWER



01 : 53 : 12



Exit



Information

Question

Q58 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

The array representation of a complete binary tree contains the data in sorted order. Which traversal of the tree will produce the data in sorted form? A

**OPTIONS**

PREORDER

INORDER

POSTORDER

LEVEL ORDER

**SKIP****SUBMIT ANSWER**



01 : 53 : 07



Exit



Information

Question

Q59 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

INORDER TRAVERSAL follows

### OPTIONS

Left, Node, Right

Node, Left, right

Left, Right, Node

None of these

SKIP

SUBMIT ANSWER



01 : 53 : 04



Exit



Information

Question

Q60 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Post Order Traversal Follows

### OPTIONS

Left, Node, Right

Node, Left, right

Left, Right, Node

None of these

SKIP

SUBMIT ANSWER



01 : 53 : 01



Exit



Information



Question

Q61 / 80



## PASSAGE

Consider below mentioned algorithm:

Step 1: IF HEAD = NULL

    Write UNDERFLOW

    Go to Step 8

    [END OF IF]

Step 2: SET PTR = HEAD

Step 3: Repeat Steps 4 and 5 while PTR -> NEXT!=

    NULL

    Step 4: SET PREPTR = PTR

    Step 5: SET PTR = PTR -> NEXT

    [END OF LOOP]

    Step 6: SET PREPTR -> NEXT = NULL

    Step 7: FREE PTR

    Step 8: EXIT

**Skip****Submit Answer**



01 : 52 : 59



Exit



Information

Question

Q61 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

UNDERFLOW condition is associated with which linked list operation?

**OPTIONS**

Insertion

Deletion

Searching

None of these

**SKIP****SUBMIT ANSWER**



01 : 51 : 33



Exit



Information



Question

Q61 / 80



## PASSAGE

Consider below mentioned algorithm:

Step 1: IF HEAD = NULL

    Write UNDERFLOW

    Go to Step 8

    [END OF IF]

Step 2: SET PTR = HEAD

Step 3: Repeat Steps 4 and 5 while PTR -> NEXT!=

    NULL

    Step 4: SET PREPTR = PTR

    Step 5: SET PTR = PTR -> NEXT

    [END OF LOOP]

    Step 6: SET PREPTR -> NEXT = NULL

    Step 7: FREE PTR

    Step 8: EXIT

  
SKIP

SUBMIT ANSWER



01 : 51 : 06



Exit



Information

Question

Q62 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

What is the operation performed by the given algorithm in the linked list?

**OPTIONS**

Insertion

Deletion

Searching

None of these

**SKIP****SUBMIT ANSWER**



01 : 51 : 31



Exit



Information

Question

Q61 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

UNDERFLOW condition is associated with which linked list operation?

**OPTIONS**

Insertion

Deletion

Searching

None of these

**SKIP****SUBMIT ANSWER**



01 : 51 : 03



Exit



Information

Question

Q63 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

When will the UNDERFLOW statement be printed?

**OPTIONS**

When there is no element in the linkedlist

When user is trying to delete element from the linked list but it is already empty.

both of these

None of these

**SKIP****SUBMIT ANSWER**



01 : 51 : 00



Exit



Information

Question

Q64 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

OVERFLOW condition is associated with which operation in the linked list?

**OPTIONS**

Insertion

Deletion

Searching

None of these

**SKIP****SUBMIT ANSWER**



01 : 50 : 57



Exit



Information

Question

Q65 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

When some node is deleted from the linkedlist what happens with memory which was allocated to that node?

**OPTIONS**

Memory is put up in the AVAIL list.

that can be used by some other data structures

Both 1 and 2

none of these

**SKIP****SUBMIT ANSWER**



01 : 50 : 48



Exit



Information

Question

Q66 / 80



## PASSAGE

Consider the given program and Answe the related questions:

```
#define MAX 100
```

```
int top=-1;
```

```
int item;
```

```
char stack_string[MAX];
```

```
void pushChar(char item);
```

```
char popChar(void);
```

```
int isEmpty(void);
```

```
int isFull(void);
```

```
int main()
```

```
{
```

```
char str[MAX];
```

```
int i;
```

```
printf("Input a string: ");
```

```
gets(str);
```

```
for(i=0;i pushChar(str[i]);
```

```
for(i=0;i str[i]=popChar();
```

**Skip****Submit Answer**



01 : 49 : 55



Exit



Information

Question

Q67 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Which function is used to check whether stack is empty?

**OPTIONS**

isempty()

isfull()

Not defined

none of these

**SKIP****SUBMIT ANSWER**



01 : 49 : 51



Exit



Information

Question

Q68 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

What is the maximum number of elements which can be saved in the given data structure?

**OPTIONS**

99

100

Not defined

none of these

**SKIP****SUBMIT ANSWER**



01 : 49 : 47



Exit



Information

Question

Q69 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

What will be output of program if input data is Hello World!

**OPTIONS**

!dlroW olleH

Hello World!

Hello World

dlroW olleH

**SKIP****SUBMIT ANSWER**



01 : 49 : 20



Exit



Information

Question

Q70 / 80



## PASSAGE

Consider the given program and Answe the related questions:

```
#define MAX 100  
int top=-1;  
int item;
```

```
char stack_string[MAX];  
void pushChar(char item);  
char popChar(void);  
int isEmpty(void);  
int isFull(void);  
int main()  
{  
    char str[MAX];  
    int i;  
    printf("Input a string: ");  
    gets(str);  
    for(i=0;i<=str[i];)  
        pushChar(str[i]);  
    for(i=0;i<=str[i];)  
        str[i]=popChar();
```

SKIP

SUBMIT ANSWER



01 : 49 : 58



Exit



Information

Question

Q66 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Which data structure is used for doing the program?

**OPTIONS**

Stack

Array

Linked List

none of these

**SKIP****SUBMIT ANSWER**



01 : 49 : 09



Exit



Information

Question

Q70 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

What is the purpose of using given program?

#### OPTIONS

Pop Top element

Push new element

Reverse a string

none of these

SKIP

SUBMIT ANSWER



01 : 48 : 25



Exit



Information



Question

Q71 / 80



## PASSAGE

Consider the statement and answer questions accordingly:

AVL tree is a self-balancing Binary Search Tree (BST) where the difference between heights of left and right subtrees cannot be more than one for all nodes.

SKIP

SUBMIT ANSWER



01 : 48 : 22



Exit



Information

Question

Q71 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Based on complexity of insertion, deletion and searching in AVL tree, Which of the following is TRUE?

### OPTIONS

The cost of searching an AVL tree is  $\Theta(\log n)$  but that of a binary search tree is  $O(n)$

The cost of searching an AVL tree is  $\Theta(\log n)$  but that of a complete binary tree is  $\Theta(n \log n)$

The cost of searching a binary search tree is  $O(\log n)$  but that of an AVL tree is  $\Theta(n)$

The cost of searching an AVL tree is  $\Theta(n \log n)$

SKIP

SUBMIT ANSWER



01 : 48 : 18



Exit



Information

Question

Q71 / 80

**printed in bold to help you locate them while answering some of the questions.**

Based on complexity of insertion, deletion and searching in AVL tree, Which of the following is TRUE?

**OPTIONS**

The cost of searching an AVL tree is  $\Theta(\log n)$  but that of a binary search tree is  $O(n)$

The cost of searching an AVL tree is  $\Theta(\log n)$  but that of a complete binary tree is  $\Theta(n \log n)$

The cost of searching a binary search tree is  $O(\log n)$  but that of an AVL tree is  $\Theta(n)$

The cost of searching an AVL tree is  $\Theta(n \log n)$  but that of a binary search tree is  $O(n)$

SKIP

SUBMIT ANSWER



01 : 47 : 59



Exit



Information

Question

Q72 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

What are the different rotations done in AVL tree?

#### OPTIONS

Left rotation

Right rotation

Left-Right rotation

Right-Left rotation

All of these

SKIP

SUBMIT ANSWER



01 : 47 : 54



Exit



Information

Question

Q73 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Why we need to a binary tree which is height balanced?

#### OPTIONS

to avoid formation of skew trees

to save memory

to attain faster memory access

to simplify storing

SKIP

SUBMIT ANSWER



01 : 47 : 52



Exit



Information

Question

Q74 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Given an empty AVL tree, how would you construct AVL tree when a set of numbers are given without performing any rotations?

#### OPTIONS

just build the tree with the given input

find the median of the set of elements given, make it as root and construct the tree

use trial and error

use dynamic programming to build the tree

SKIP

SUBMIT ANSWER



01 : 47 : 50



Exit



Information

Question

Q75 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Consider the below left-left rotation pseudo code where the node contains value pointers to left, right child nodes and a height value and Height() function returns height value stored at a particular node.

```
avltree leftrotation(avltreenode z):
    avltreenode w =x-left
    x-left=w-right
    w-right=x
    x-height=max(Height(x-left),Height(x-right))+1
    w-height=max(missing)+1
    return w
What is missing?
```

### OPTIONS

Height(w-left), x-height

SKIP

SUBMIT ANSWER



01:47:45



Exit

**Information****Question**

Q75 / 80



avltree leftrotation(avltreenode z):

avltreenode w =x-left

x-left=w-right

w-right=x

x-height=max(Height(x-left),Height(x-right))+1

w-height=max(missing)+1

return w

What is missing?

**OPTIONS**

Height(w-left), x-height

Height(w-right), x-height

Height(w-left), x

Height(w-left)

**SKIP****SUBMIT ANSWER**



01:47:27



Exit



Information

Question

Q76 / 80



## PASSAGE

Answer the question after considering the given statement

Unlike linear data structures (Array, Linked List, Queues, Stacks, etc) which have only one logical way to traverse them, trees can be traversed in different ways.

SKIP

SUBMIT ANSWER



01 : 46 : 30



Exit



Information

Question

Q76 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

The inorder and preorder traversal of a binary tree are **d b e a f c g** and **a b d e c f g**, respectively. The postorder traversal of the binary tree is:

**OPTIONS**d e **b** f g c ae d **b** g f c ae d **b** f g c ad e f g **b** c a

SKIP

SUBMIT ANSWER



01 : 46 : 25



Exit



Information

Question

Q77 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

What is common in three different types of traversals (Inorder, Preorder and Postorder)?

### OPTIONS

Root is visited before right subtree

Left subtree is always visited before right subtree

Root is visited after left subtree

All of the above

None of these

**SKIP**

**SUBMIT ANSWER**



01 : 46 : 22



Exit



Information

Question

Q78 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

What does the following function do for a given binary tree?

```
int fun(struct node *root)
{
    if (root == NULL)
        return 0;
    if (root->left == NULL && root->right == NULL)
        return 0;
    return 1 + fun(root->left) + fun(root->right);
}
```

### OPTIONS

Counts leaf nodes

Counts internal nodes

Returns height where height is defined as

SKIP

SUBMIT ANSWER



01 : 46 : 19



Exit



Information

Question

Q79 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Which traversal of tree resembles the breadth first search of the graph?

### OPTIONS

Pre order

Post order

Level Order

inorder

SKIP

SUBMIT ANSWER



01 : 45 : 59



Exit



Information

Question

Q80 / 80



**Read the following passage to answer the given questions based on it. Some words/phrases are printed in bold to help you locate them while answering some of the questions.**

Which of the following pairs of traversals is not sufficient to build a binary tree from the given traversals?

### OPTIONS

Preorder and Inorder

Preorder and Postorder

Inorder and Postorder

None of the Above

SKIP

SUBMIT ANSWER