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<b>SR.NO</b>	<b>Project NAME</b>	<b>Technology</b>
1	Online E-Learning Platform Hub	React+Springboot+MySql
2	PG Mates / RoomSharing / Flat Mates	React+Springboot+MySql
3	Tour and Travel management System	React+Springboot+MySql
4	Election commition of India (online Voting System)	React+Springboot+MySql
5	HomeRental Booking System	React+Springboot+MySql
6	Event Management System	React+Springboot+MySql
7	Hotel Management System	React+Springboot+MySql
8	Agriculture web Project	React+Springboot+MySql
9	AirLine Reservation System / Flight booking System	React+Springboot+MySql
10	E-commerce web Project	React+Springboot+MySql
11	Hospital Management System	React+Springboot+MySql
12	E-RTO Driving licence portal	React+Springboot+MySql
13	Transpotation Services portal	React+Springboot+MySql
14	Courier Services Portal / Courier Management System	React+Springboot+MySql
15	Online Food Delivery Portal	React+Springboot+MySql
16	Muncipal Corporation Management	React+Springboot+MySql
17	Gym Management System	React+Springboot+MySql
18	Bike/Car ental System Portal	React+Springboot+MySql
19	CharityDonation web project	React+Springboot+MySql
20	Movie Booking System	React+Springboot+MySql

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23	Employee Management System	React+Springboot+MySql
24	Payroll Management System	React+Springboot+MySql
25	RealEstate Property Project	React+Springboot+MySql
26	Marriage Hall Booking Project	React+Springboot+MySql
27	Online Student Management portal	React+Springboot+MySql
28	Resturant management System	React+Springboot+MySql
29	Solar Management Project	React+Springboot+MySql
30	OneStepService LinkLabourContractor	React+Springboot+MySql
31	Vehical Service Center Portal	React+Springboot+MySql
32	E-wallet Banking Project	React+Springboot+MySql
33	Blogg Application Project	React+Springboot+MySql
34	Car Parking booking Project	React+Springboot+MySql
35	OLA Cab Booking Portal	React+NextJs+Springboot+MySql
36	Society management Portal	React+Springboot+MySql
37	E-College Portal	React+Springboot+MySql
38	FoodWaste Management Donate System	React+Springboot+MySql
39	Sports Ground Booking	React+Springboot+MySql
40	BloodBank mangement System	React+Springboot+MySql



41	Bus Tickit Booking Project	React+Springboot+MySql
42	Fruite Delivery Project	React+Springboot+MySql
43	Woodworks Bed Shop	React+Springboot+MySql
44	Online Dairy Product sell Project	React+Springboot+MySql
45	Online E-Pharma medicine sell Project	React+Springboot+MySql
46	FarmerMarketplace Web Project	React+Springboot+MySql
47	Online Cloth Store Project	React+Springboot+MySql
48	Train Ticket Booking Project	React+Springboot+MySql
49	Quizz Application Project	JSP+Springboot+MySql
50	Hotel Room Booking Project	React+Springboot+MySql
51	Online Crime Reporting Portal Project	React+Springboot+MySql
52	Online Child Adoption Portal Project	React+Springboot+MySql
53	online Pizza Delivery System Project	React+Springboot+MySql
54	Online Social Complaint Portal Project	React+Springboot+MySql
55	Electric Vehical management system Project	React+Springboot+MySql
56	Online mess / Tiffin management System Project	React+Springboot+MySql
57		React+Springboot+MySql
58		React+Springboot+MySql
59		React+Springboot+MySql
60		React+Springboot+MySql

## Spring Boot + React JS + MySQL Project List

Sr.No	Project Name	YouTube Link
1	Online E-Learning Hub Platform Project	<a href="https://youtu.be/KMjyBaWmgzg?si=YckHuNzs7eC84-IW">https://youtu.be/KMjyBaWmgzg?si=YckHuNzs7eC84-IW</a>
2	PG Mate / Room sharing/Flat sharing	<a href="https://youtu.be/4P9clHg3wvk?si=4uEsi0962CG6Xodp">https://youtu.be/4P9clHg3wvk?si=4uEsi0962CG6Xodp</a>
3	Tour and Travel System Project Version 1.0	<a href="https://youtu.be/-UHOBywHaP8?si=KHHfE_A0uv725f12">https://youtu.be/-UHOBywHaP8?si=KHHfE_A0uv725f12</a>
4	Marriage Hall Booking	<a href="https://youtu.be/VXz0kZQi5to?si=ILOS-QG3TpAFP5k7">https://youtu.be/VXz0kZQi5to?si=ILOS-QG3TpAFP5k7</a>
5	Ecommerce Shopping project	<a href="https://youtu.be/vJ_C6LkhrZ0?si=YhcBylSErvdn7paq">https://youtu.be/vJ_C6LkhrZ0?si=YhcBylSErvdn7paq</a>
6	Bike Rental System Project	<a href="https://youtu.be/FlzsAmIBCbk?si=7ujQTJqEgkQ8ju2H">https://youtu.be/FlzsAmIBCbk?si=7ujQTJqEgkQ8ju2H</a>
7	Multi-Restaurant management system	<a href="https://youtu.be/pvV-pM2Jf3s?si=PgvnT-yFc8ktrDxB">https://youtu.be/pvV-pM2Jf3s?si=PgvnT-yFc8ktrDxB</a>
8	Hospital management system Project	<a href="https://youtu.be/lynlouBZvY4?si=CXzQs3BsRkjKhZCw">https://youtu.be/lynlouBZvY4?si=CXzQs3BsRkjKhZCw</a>
9	Municipal Corporation system Project	<a href="https://youtu.be/cVMx9NVyl4I?si=qX0oQt-GT-LR_5jF">https://youtu.be/cVMx9NVyl4I?si=qX0oQt-GT-LR_5jF</a>
10	Tour and Travel System Project version 2.0	<a href="https://youtu.be/_4u0mB9mHXE?si=gDiAhKBowi2gNUKZ">https://youtu.be/_4u0mB9mHXE?si=gDiAhKBowi2gNUKZ</a>

Sr.No	Project Name	YouTube Link
11	Tour and Travel System Project version 3.0	<a href="https://youtu.be/Dm7nOdpasWg?si=P_Lh2gcOFhlyudug">https://youtu.be/Dm7nOdpasWg?si=P_Lh2gcOFhlyudug</a>
12	Gym Management system Project	<a href="https://youtu.be/J8_7Zrkg7ag?si=LcxV51ynfUB7OptX">https://youtu.be/J8_7Zrkg7ag?si=LcxV51ynfUB7OptX</a>
13	Online Driving License system Project	<a href="https://youtu.be/3yRzsMs8TLE?si=JRI_z4FDx4Gmt7fn">https://youtu.be/3yRzsMs8TLE?si=JRI_z4FDx4Gmt7fn</a>
14	Online Flight Booking system Project	<a href="https://youtu.be/m755rOwdk8U?si=HURvAY2VnizlyJlh">https://youtu.be/m755rOwdk8U?si=HURvAY2VnizlyJlh</a>
15	Employee management system project	<a href="https://youtu.be/ID1iE3W_GRw?si=Y_jv1xV_BljhrD0H">https://youtu.be/ID1iE3W_GRw?si=Y_jv1xV_BljhrD0H</a>
16	Online student school or college portal	<a href="https://youtu.be/4A25aEKfei0?si=RoVgZtxMk9TPdQvD">https://youtu.be/4A25aEKfei0?si=RoVgZtxMk9TPdQvD</a>
17	Online movie booking system project	<a href="https://youtu.be/Lfjv_U74SC4?si=fiDvrhhrjb4KSIsm">https://youtu.be/Lfjv_U74SC4?si=fiDvrhhrjb4KSIsm</a>
18	Online Pizza Delivery system project	<a href="https://youtu.be/Tp3izreZ458?si=8eWAOzA8SVdNwlyM">https://youtu.be/Tp3izreZ458?si=8eWAOzA8SVdNwlyM</a>
19	Online Crime Reporting system Project	<a href="https://youtu.be/0UlzReSk9tQ?si=6vN0e70TVY1GOwPO">https://youtu.be/0UlzReSk9tQ?si=6vN0e70TVY1GOwPO</a>
20	Online Children Adoption Project	<a href="https://youtu.be/3T5HC2HKyT4?si=bntP78niYH802I7N">https://youtu.be/3T5HC2HKyT4?si=bntP78niYH802I7N</a>

# DATA STRUCTURE



## ADS | CCEE Practice Test - IV

Total points 16/20



Duration: 30 Mins

The respondent's [REDACTED] was recorded on submission of this form.

0 of 0 points

PRN \*

24084 [REDACTED]

Name \*

[REDACTED]

Centre \*

Kharghar



16 of 20 points

✓ What is the total number of distinct binary trees that can be constructed using four unlabelled nodes?

\*1/1

☐ 10

☒ 14



☐ 13

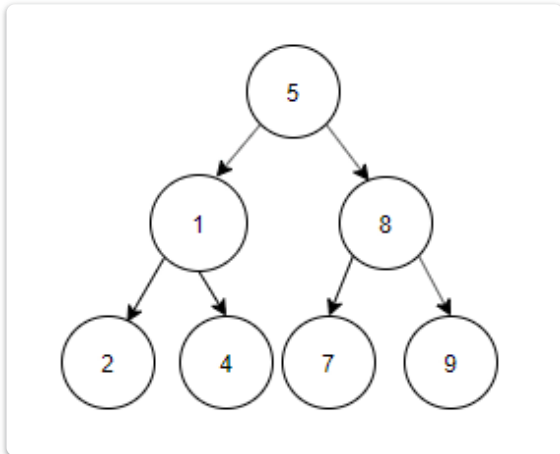
☐ 12

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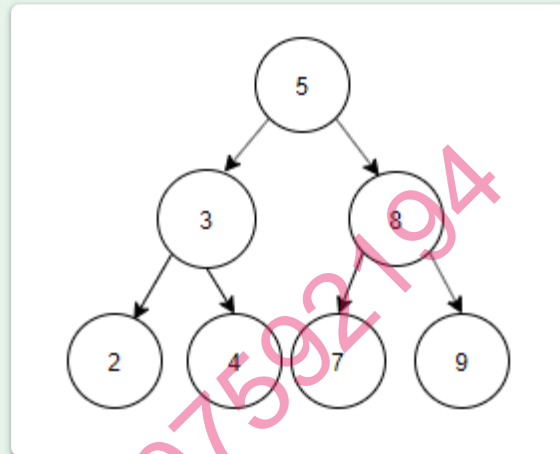
✓ Construct a binary search tree by using postorder sequence given below.

\*1/1

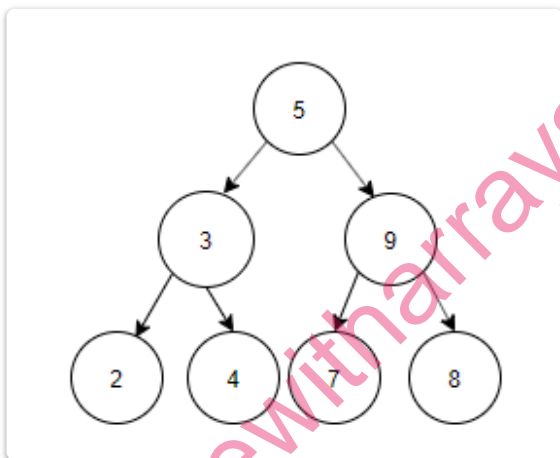
Postorder: 2, 4, 3, 7, 9, 8, 5.



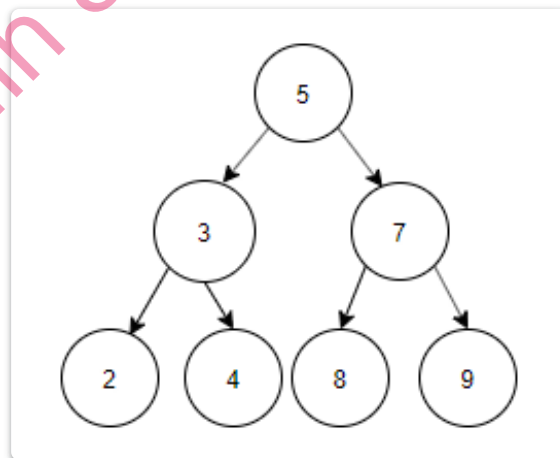
☐ Option 1



☒ Option 2



☐ Option 3



☐ Option 4



- ✓ What will be the output when `aeeHelloPadhlo(new int[]{3, 7, 1, 2, 8, 4, 5})` is called? \*1/1

```
int aeeHelloPadhlo(int[] arr) {  
  
    int n = arr.length + 1;  
  
    int expectedSum = (n * (n + 1)) / 2;  
  
    int actualSum = 0;  
  
    for (int num : arr) {  
        actualSum += num;  
    }  
  
    return expectedSum - actualSum;  
}  
  
int padhneKeBaad = aeeHelloPadhlo(new int[]{3, 7, 1, 2, 8, 4, 5});  
System.out.println(padhneKeBaad);
```

☒ 6



☐ 9

☐ 4

☐ 5

✓ class MyStack {

\*

1/1

protected static final int MAX\_SIZE = 150;

protected int count, index = -1;

protected Object elements[];

public MyStack() {

elements = new Object[MAX\_SIZE];

}

public void add(Object item) {

if (count == MAX\_SIZE) {

System.out.println("Stack overflow");

return;

} else {

index++;

elements[index] = item;

count++;

}

}

public Object remove() {

if (index < 0) {

```
        return null;

    } else {

        Object item = elements[index];

        index--;

        count--;

        return item;

    }

}

}
```

```
public class StackTest {

    public static void main(String args[]) {

        MyStack myStack = new MyStack();

        myStack.add("First");

        myStack.add("Second");

        Object element1 = myStack.remove();

        Object element2 = myStack.remove();

        Object element3 = myStack.remove();

        System.out.println(element3);

    }

}
```

**What will be the output of the StackTest class?**



Second



First



null



Stack overflow



What is the worst case time complexity of inserting a node in a doubly linked list? \*1/1



$O(n \log n)$



$O(\log n)$



$O(n)$



$O(1)$



The Binary Search algorithm is employed to find an element in a sorted array efficiently. What type of approach does it utilize to achieve this? \*1/1



Linear way to search elements



Divide and Conquer way to search elements



Sort and search Linearly



Greedy search algorithm



None of the above

✓ Consider an AVL tree that needs to maintain its balanced property while inserting the following elements in the specified order: 38, 53, 43, 28, 33, 63, 81, 23, 31. After performing all the insertions, how many rotations would be required to ensure the AVL tree remains balanced? \*1/1

- ☐ 2 left rotations, 2 right rotations
- ☐ 2 left rotations, 3 right rotations
- ☒ 3 left rotations, 2 right rotations
- ☐ 3 left rotations, 1 right rotation

✓ What is the best-case time complexity of the Linear search? 1/1

- ☐  $O(n)$
- ☒  $O(1)$
- ☐  $O(n \log n)$
- ☐  $O(n^2)$



✓ What will be the result of the following operation? \*

1/1

**Top(Push(T, Y))**

☒ Y



☐ Y + T

☐ T

☐ YT

✓ In a full binary tree, If you were to derive a formula to express the number of leaves in relation to the number of internal nodes, which of the following relationships would accurately represent this connection?

\*1/1

☐  $L = 2 * I$

☒  $L = I + 1$



☐  $L = I - 1$

☐  $L = 2 * I - 1$

✓ The preorder traversal of a binary search tree is 15, 10, 12, 11, 20, 18, 16, 19. Which one of the following is the postorder traversal of the tree? \*1/1

- ☐ 20, 19, 18, 16, 15, 12, 11, 10
- ☐ 10, 11, 12, 15, 16, 18, 19, 20
- ☒ 11, 12, 10, 16, 19, 18, 20, 15
- ☐ 19, 16, 18, 20, 11, 12, 10, 15

✓ If you were tasked with determining the total number of nodes  $N$  in a full binary tree, given that there are  $L$  leaves, which of the following equations would best describe this relationship? \*1/1

- ☐  $N = 2 * L$
- ☐  $N = L + 1$
- ☐  $N = L - 1$
- ☒  $N = 2 * L - 1$

- ✓ What will be the output when `chinTapakDum(new int[]{4, 1, 2, 1, 2})` is called? \*1/1

```
int chinTapakDum(int[] arr) {  
    int result = 0;  
    for (int num : arr) {  
        result ^= num;  
    }  
    return result;  
}
```

```
int finalDum = chinTapakDum(new int[]{4, 1, 2, 1, 2});  
System.out.println(finalDum);
```

☒ 4

☐ 1

☐ 2

☐ 3



✓ In a binary min-heap with 103 unique elements, let K represent the index in the array where the largest element is stored. How many possible values can K take in this scenario?

\*1/1

☐ 53

☒ 52



☐ 27

☐ 1

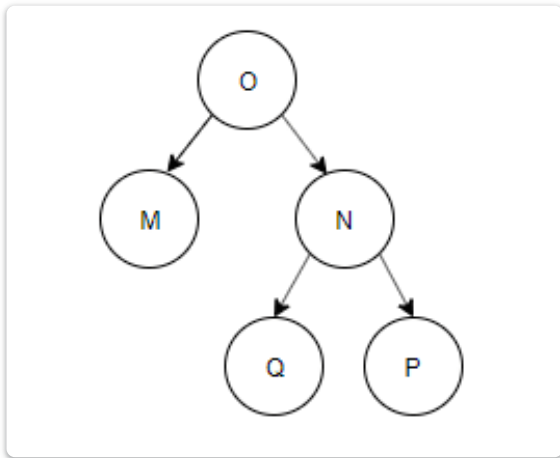
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✗ Construct a binary tree by using postorder and inorder sequences given below.

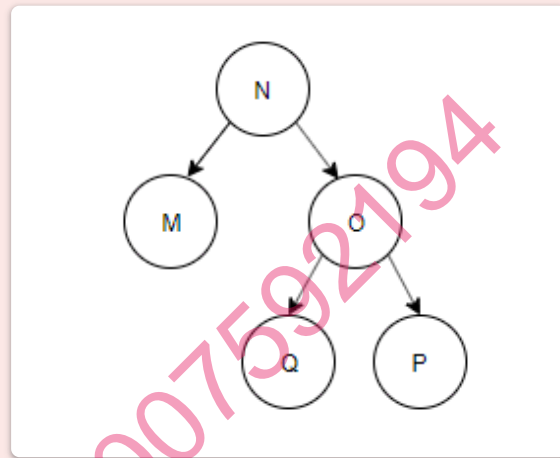
\*0/1

Inorder: N, M, P, O, Q

Postorder: N, P, Q, O, M

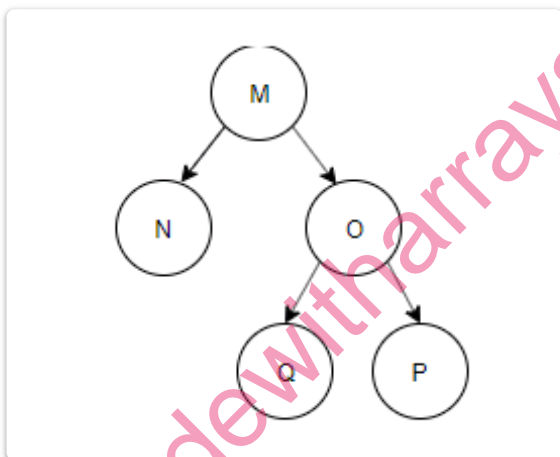


☐ Option 1

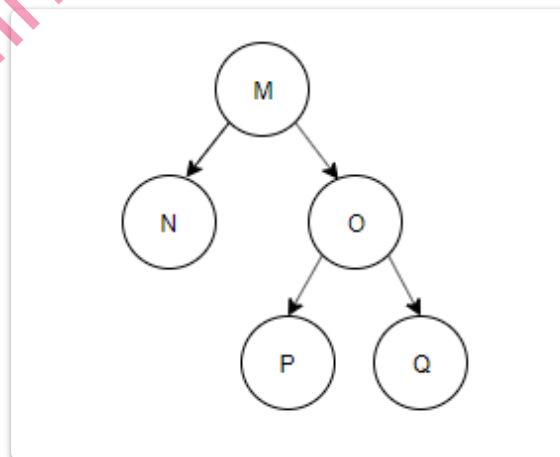


☒ Option 2

✗



☐ Option 3



☐ Option 4

Correct answer

☒ Option 4



✓ You are given an unsorted array containing  $n$  distinct integers. You need to determine the maximum value in the array using a single traversal of the elements. Which of the following option accurately describes the time complexity of this operation?

\*1/1

- ☐  $O(1)$
- ☐  $O(\log n)$
- ☒  $O(n)$
- ☐  $O(n \log n)$



✗ Which of the following insertion sequences will **not** require any rotations to maintain balance when inserting the elements  $\{3, 4, 5, 6, 7, 8, 9\}$  into an empty AVL tree?

\*0/1

- ☐ 6, 4, 8, 3, 5, 7, 9
- ☐ 6, 3, 5, 4, 9, 7, 8
- ☐ 9, 8, 7, 6, 5, 4, 3

☒ 3, 4, 5, 6, 7, 8, 9



Correct answer

☒ 6, 4, 8, 3, 5, 7, 9

✗ The height of a binary tree is the maximum number of edges in any root to leaf path. The maximum number of nodes in a binary tree of height  $h$  is: \*0/1

☒  $2^h - 1$  ✗

☐  $2^{(h-1)} - 1$

☐  $2^{(h+1)} - 1$

☐  $2^{*(h+1)}$

Correct answer

☒  $2^{(h+1)} - 1$

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- ✓ Consider the Binary Search algorithm, which is designed to operate on sorted arrays. If you were to evaluate its performance in terms of efficiency: \*1/1

**For a scenario where the element is not found or is located at the last position,** think about how many comparisons would be required relative to the number of elements in the array.

**In a typical case where the target element is somewhere in the middle of the search process,** reflect on the expected number of comparisons needed.

Based on your analysis, what can be inferred about the time complexity of the Binary Search algorithm in terms of both worst-case and average-case scenarios?

- ☐  $O(n^2)$
- ☐  $O(1)$
- ☐  $O(n \log n)$
- ☒  $O(\log n)$



✗ Which one of the following sequences, when stored in an array at locations **A[1], A[2], A[3]...**, **A[10]**, forms a max-heap? \*0/1

☐ 28, 22, 19, 12, 18, 15, 6, 10, 11, 17

☒ 28, 22, 19, 10, 18, 15, 6, 11, 12, 17 ✗

☐ 28, 19, 22, 12, 18, 15, 6, 10, 11, 17

☐ 22, 28, 19, 12, 18, 15, 10, 11, 6, 17

Correct answer

☒ 28, 22, 19, 12, 18, 15, 6, 10, 11, 17

Feedback of Mock

0 of 0 points

Level of exam \*

☐ Easy

☒ Moderate

☐ Tough

How was your Mock's experience? (No one word answer) \*

Great! The function names were funny but all my concepts of trees and some sorting also revised completely. Thanks!

I understand the responsibility towards my life & everyone around me. I promise, I am sincere towards my studies. \*

☒ Yes

☐ Other: .....

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