

Dell Technologies - Backend Developer

Interview Process

- Online Round/ Written Exam
- Technical Round 1
- Technical Round 2
- HR Interview

Interview Questions

1. Move Zeros To Left. You are given an array 'ARR' of integers. Your task is to modify the array so that all the array elements having zero values get pushed to the left and all the array elements having non-zero value come after them while maintaining their relative order.
2. Do you have expertise on windows and hardware troubleshooting?
3. Greatest Common Divisor. You are given two numbers, 'X' and 'Y'. Your task is to find the greatest common divisor of the given two numbers. The Greatest Common Divisor of any two integers is the largest number that divides both integers.
4. What is Kubernetes? why is it required? How it is different from Docker swarm?
5. What is the difference between join and source qualifier?
6. What is JavaScript?
7. Enumerate the differences between Java and JavaScript.
8. What are JavaScript Data Types?
9. What is DBMS?
10. Difference between DBMS and data?
11. Two SQL queries on LIMIT and ORDER.
12. Do you have expertise on windows and hardware troubleshooting?
13. What is the difference between `char a [] ="string";` and `char .p ="star";`?
14. what is the difference between thread and a processing are the used?
15. What is the difference between HTTP GET and HTTP Post? Explain
16. What is the difference between heap and stack memory? when are they used?
17. What is the difference between pointers and references? Why?
18. Explain "Passing by value", "passing by pointer" and "passing by reference"?
19. Explain pre-order, post-order and in-order binary tree traversal.
20. What is inheritance in Java?
21. difference between array, vector, list and dequeue?
22. Implement an algorithm to sort an array.
23. Difference between String and StringBuffer?
24. There are 2 sorted arrays, arr and brr, of size n and m, respectively. Write an algorithm to find the median of the array obtained after merging arrays arr and brr.

25. Given 2 arrays, write a function to merge the first one into the second one, resulting in an increasingly sorted array.
26. Find all palindromic decompositions of a given string s.
27. Given a linked list, zip it from its two ends in place, using constant extra space. The nodes in the resulting “zipped” linked list should go in this order: first, last, second, second to last, and so on.
28. Given an integer singly linked list L of size n, and an integer k, you have to swap kth (1-indexed) node from the beginning with kth node from the end.
29. Implement an iterator over a binary tree with integer values. Your iterator will be initialized with the root node.
30. Given a binary tree, return all paths from root to leaf.
31. Build a min stack. Min stack should support push, pop methods (as usual stack), as well as one method that returns the minimum element in the entire stack.
32. Given a sequence of enqueue and dequeue operations, return a result of their execution without using a queue data structure.
33. Give me the code of in-order recursive and non-recursive.
34. A lot of questions were asked on sorting for eg. Best algorithm on the basis of number of swaps, number of comparisons etc.
35. How would you sort words in a large file?
36. Explain the T9 Dictionary.
37. What is the Insertion Sort Code?
38. There is a program that inserts and deletes node in a sorted singly linked list. There is a bug in one of the modules, how would you debug it?
39. What are the ways in which fault tolerance can be ensured in systems? (Different redundancy techniques)?
40. A pair of redundant systems are operating, how would you ensure that when one of them goes down, the other one will take over its operation?
41. Explain Enterprise Resource Planning (ERP), and what sort of a database is utilised in an ERP application?
42. If you have to store one lakh objects, what will be a better option- a hash map or an array list?
43. Write a program to reverse a linked list.
44. What is meant by “bit masking”?
45. Explain “structure padding”?
46. What is “platform independence”?
47. How would you check if a binary tree is BST or not? Write a program.
48. How is final different from finally and finalize()?
49. Write an algorithm to check if there is a loop in a doubly linked list.
50. Explain process areas in CMMI.
51. What is better – “bit-shift a value” or “multiply by 2”?
52. How would you swap the Kth node from the beginning with Kth node from end in a Linked List?
53. Tell me a few examples of final classes defined in Java API.
54. What are the Data link protocols?

55. I want to print "Hello" even before main() is executed. How will you achieve that?
56. What do you mean by abstract classes?
57. What are library functions?
58. State two differences between an object and a class.
59. What is the difference between "truncate" and "delete"?
60. Differentiate between lists and tuples.
61. Explain the ternary operator in Python.
62. What are negative indices?
63. Is Python case-sensitive?
64. How long can an identifier be in Python?
65. What is the pass statement in Python?
66. Explain help() and dir() functions in Python.
67. What is slicing?
68. What is the difference between a list and a tuple in Python?
69. Write a program to display the Fibonacci sequence in Python.
70. Explain about Django session.
71. List the ways we add view functions to urls.py.
72. How would you declare a comment in Python?
73. How does a function return values?
74. What is the Python interpreter prompt?
75. How would you define a block in Python?
76. Why do we need to break and continue in Python?
77. What are built-in type does python provide?
78. What is namespace in Python?
79. What is lambda in Python?
80. How to create a class in Python?
81. Does Python make use of access specifiers
82. Explain the procedure to minimize or lower the outages of Memcached server in your Python development.
83. What is the use of manage.py?
84. Is Django stable?
85. Write a program to count the number of capital letters in a file.
86. In Python what are iterators?
87. Write a code for a sorting algorithm and explain it.
88. In-order, pre-order and post-order traversal in case of a Binary Search Tree.
89. Debugging programs.
90. Explain various redundancy techniques.
91. What is Enterprise Resource Planning (ERP), and what kind of database is used for it?
92. What are data link protocols?
93. Implement a tic-tac-toe game.
94. Reverse a linked list.
95. What is hash map?
96. Give me the code of in-order recursive and non-recursive
97. How would you sort words in a large file?

98. What is the Insertion Sort Code?
99. Give us a few details on the various projects that you undertook during your course
100. What is meant by “bit masking”?
101. A pair of redundant systems are operating, how would you ensure that when one of them goes down, the other one will take over its operation?
102. There is a program that inserts and deletes nodes in a sorted singly linked list. There is a bug in one of the modules, how would you debug it?
103. If you have to store one lakh objects, what will be a better option- a hash map or an array list?
104. What’s the use of dynamic memory allocation over static.
105. What are the differences between classful and classless IP addressing?
106. What are the different ways of representation of IP address?
107. Explain Spanning Tree Protocol
108. Explain Spin Lock
109. Explain Limited Broadcasting and Directed broadcasting?
110. Explain Structure Padding?
111. What are the ways in which fault tolerance can be ensured in systems? (Different redundancy techniques)?
112. Write a program to reverse a linked list.
113. How would you check if a binary tree is BST or not? Write a program.
114. How is final different from finally and finalize()?
115. What is Platform Independence?
116. Write an algorithm to check if there is a loop in a doubly-linked list.
117. What all issues should be taken into consideration during the database design?
118. What are the Network ID and Host ID?
119. How would you swap the Kth node from the beginning with the Kth node from the end in a Linked List.
120. What is better – “bit-shift a value” or “multiply by 2”?
121. Explain process areas in CMMI?
122. Best algorithm on the basis of the number of swaps, number of comparisons
123. Explain in-order, pre-order, and post-order traversal in the case of a Binary Search Tree.
124. What are the Data link protocols?
125. Explain Enterprise Resource Planning (ERP), and what sort of a database is utilized in an ERP application?
126. Implement a tic-tac-toe game