

### Latest Amazon Interview Questions -1

1. How do you convert a decimal number to its hexa-decimal equivalent. Give a C code to do the same
2. Explain polymorphism citing an example.
3. What are the 4 basics of OOP?
4. Define Data Abstraction. What is its importance?
5. Given an array all of whose elements are positive numbers, find the maximum sum of a subsequence with the constraint that no 2 numbers in the sequence should be adjacent in the array.
  - i) 3 2 7 10 should return 13 (sum of 3 and 10)
  - ii) 3 2 5 10 7 should return 15 (sum of 3, 5 and 7)
6. Given a Binary Search Tree, write a program to print the kth smallest element without using any static/global variable. You can't pass the value k to any function also.
7. You are given some denominations of coins in an array (int denom[]) and infinite supply of all of them. Given an amount (int amount), find the minimum number of coins required to get the exact amount. What is the method called?
8. Given an array of size n. It contains numbers in the range 1 to n. Each number is present at least once except for 1 number. Find the missing number.
9. Given an array of size n. It contains numbers in the range 1 to n. Each number is present at least once except for 2 numbers. Find the missing numbers.
10. Given an array of size n. It contains numbers in the range 1 to n. Find the numbers which aren't present.

### Latest Amazon Interview Questions -2

1. How would you find the second largest element in an array using minimum no of comparisons?
2. Write a C program for level order traversal of a tree?
3. You are given: 3 types of vehicles: Motorbike, Car, and a special type of car for the handicapped.  
  
3 Types of parking: Motorbike parking, Car parking, handicapped car parking.  
Motorbikes and cars can only park in their designated parkings, while the handicapped cars can park either in their own parking or the regular car parking.  
How would you model this as classes? Explain your methods.
5. Given 2 tables: Employee(Employee\_Name, Dept\_No) Department(Dept\_No, Dept\_Name)  
Write an SQL query which outputs all the employees, and their department nos and names, including all those departments which have no employees working for them.

6. Explain about Inodes?
7. Give a Linux shell command to find all files in a directory which contain ip addresses.
8. Given a table Employee which has columns name and salary, write an SQL query to find the employee with the second highest salary.
9. Given a table of Player which contains S.no and player name, write a query which finds all possible Table Tennis doubles pairings.
10. Given a string A, and a string B, and a dictionary, how would you convert A to B in the minimum no of operations, given that:
  - i) All the intermediate words must be from the dictionary
  - ii) An operation is defined as:
    - a) Delete any character from a string ex dog → do
    - b) Insert any character into a string ex cat → cart
    - c) Replace any character in the string with another ex cat → cot