Amazon Questions:-

Written Test Coding Questions:

1. Print the first non-repeating character in a given string (which is case sensitive, ‘a’ and ‘A’ are considered different.)
2. Print all permutations of a string. Example: given string = AB
   Output: A,B,AB,BA

Interview Questions:

1. Return the diameter of a tree.
2. In a 2d matrix sorted by row and column output all the elements in sorted order.
3. In an array with elements that first increase and then decrease, return the maximum element.
4. You are given a list of songs. Generate a random playlist from the songs. You can play each song only once in an iteration. Later, optimise the code when there are a large number of songs.
5. Given a tree, how will you transfer the tree to the other party so that (s)he can reproduce the exact tree. Given two traversals, construct the tree.
6. Given an m x n matrix filled with only zeroes and ones, you have to point out the location of square matrices filled with only ones.
7. Given a set of integral ranges on the number line, you will have to output the range after merging the overlapping ranges.
8. Given two strings, x and y (x is large and y is small), find the smallest window (along with indices) of x that contains all the characters of y (if there is any repetition, frequency must be the same).
9. Given a tree, print the nodes in zig-zag order.
10. Given a linked list representing a number, find the next largest number by rearranging the digits. For eg. Linked list = 1 2 3 then next largest will be 132.
11. Program to check whether a given binary tree is complete or not.
12. Program to find out path between two nodes of a binary tree.
13. Given an array with a pattern where next element is +1 or -1 of previous element for eg 3 2 1 0 1 2 1 0 1 2 3 4 , find the given element in the array.
14. Given a grid and source and destination, find the path.
15. Given a two nodes, find LCA. Either parent pointer is given or root of tree is given.
16. Given a sequence of sorted numbers, group the consecutive numbers and print the ranges. Eg: input 1 2 4 5 6 9, output: [1 2] [4 6] [9 9]

17. Same Question as above but this time the size of array is large and the missing numbers in a given range are quite less. Solve in better than O(n).
18. Given n jobs in an array (sorted in descending order) and m (parallel) machines, using the longest job first algorithm, tell which job will goto which machine.
19. Implement queue using 2 stacks. Constant time.
20. Connect all the nodes on the same level of a tree. An extra pointer is given in the nodes.
21. Given an array of integers. You have to label, for every element a[i], which is the rightmost element(greatest index) to the left of it(i.e. index <i) that is greater than a[i]. If none are, label -1.
22. Given a maze represented as a matrix and a source cell, label all cells with their distance from the source.
23. Given an array with both positive and negative elements, find the set of three elements (not necessarily continuous) whose sum is equal to a given number.
24. You are given a binary tree. You have to send it across the network and reconstruct the tree. How will you transfer the tree? How will you reconstruct it on the other machine?
25. Adding two numbers. Numbers given in the form of linked list.
26. Reverse alternate K nodes in a singly linked list.

Internship Interview Questions

1. Reverse a linked list
2. Treat each node of a linked list as a digit. Concatenate these digits and treat them as a number. Add two such lists and produce another one.
3. Doubly linked list - make its binary tree using level order traversal.
4.

Adobe

http://www.geeksforgeeks.org/adobe-interview-experience-set-25-on-campus-for-mts-1/

Xerox interview Question:

1. insertion sort
2. recurrence of fibonacci series
3. 3 ants and triangle problem
4. find two numbers in a BST whose sum is equal to N
5. quick sort
6. public key encryption
7. cache memory working, how and why
8. selection sort in linked list
9. prove complexity of selection sort
10. probability and statistics, cumulative distribution function
11. process scheduling
12. memory management in OS
13. OSI layer
14. give an example where Dijkstra algo will give wrong results
15. given N & an array of values (S1, S2…… Sm), print all combination of values from this array that add upto N
16. print ith level of a tree
17. print all boundary nodes of a tree
18. set/hashset/map/hash map the implementation and use of these
19. difference between abstract classes and interface
20. what happen when url is entered in a browser
21. difference between spatial locality and temporal locality
22. how do say that your program is NP hard or NP complete
23. Drawback if we attach multiple caches of same size
24. limited vision robot traversing through a maze with blockage
25. ADA- NP hard (complexity)
26. Python - interpreted/complied
27. URL of a page, what happen in back ground
28. diamond problem in C++
29. Distribution : probability and statistics
30. probability density and distribution
31. define a random variable
32. given a biggest URL, create a smaller one using it
33. NLP(natural language process)
34. 2nd round interview(they ask about your projects, about Xerox and some question about Probability)

Flipkart

Online test question-

Interview questions-

1. Given a linked list where every node has two pointers: next & down. You need to flatten the linked list, i.e. make it a singly linked list.
2. A stream of characters are coming in. At any point, you need to print the first non-repeating character. This needs to be done in O(1).
3. Describe external merge sorting.
4. Describe different types of sorting algorithms, their best, worst and average complexities. Also describe the different scenarios in which the specific algorithms should be used.
5. Same as 2 but stream of strings rather than character.
6. You are given even sized array of integers and an integer k. You have to pair up the elements of the array such that sum of each pair is divisible by k. Each element can be pair with only one other element. If it is not possible return false else return true
7. You are given a range [1, n] and an array A. You have to remove elements in A from range. Cost of removal of element is no of continous elements to the left of A[i] + no of continous elements to the right of A[i]. You have to minimize the overall cost.
8. All nodes at distance k from a given node in a binary tree.
9. A stream of integers is coming in. Tell top k elements at any time.
10. print sum of mirror image nodes of a binary tree in-order.
11. print all paths from root to leaf which is having sum equal to given sum
12. given an array of characters, find the length of largest substring provided that no character should be repeated in substring.
13. Given a binary tree. each node has a switch and edge has a bulb. On switching on a node, all bulbs on the edges linked to the node light up. Give the minimum number of nodes needed to light all the edges.

14. A stream of numbers is coming and k is given. At any point you need to find out the top k numbers whose frequency is the maximum till now.
15. Given a stream of numbers, find the median of the numbers read till time t.
16. Given a binary search tree with nodes swapped. Locate the node and restore the original BST.
17. Sort an array only having elements 0,1,2

    eg 0,0,1,2,1,2,2,1,0,0,1,2

Myntra Interview Questions

Interns

1. Given the array find the number of repetitions of all the numbers.(code)
2. Given a binary tree find the nodes that are at maximum depth.
3. No questions asked. Talked about projects. A little about concurrency, databases, self.
4. Given a linked list of letters , remove all vowels.
5. Given a stack of letters , remove all vowels.
6. Create linked list from an array (code)
7. Add two numbers (with a million or so digits each). The numbers are given as a string. Basically checking how to handle carry.(code)
8. Basic Discussion about self, linux (Booting, difference from windows), networking (OSI Model, topologies, basic troubleshooting), What is Unix.
9. Print fibonacci series in the following format

S.no	Fibonacci number
0	0
1	1
n	fib(n)

10. Print a spiral of numbers from 1-16

FT

1. Given the array find the number of repetitions of all the numbers.
2. Given two linked lists representing the 2 numbers add the two and save the result in third linked list.
3. Given an array take each elements from an array and put it into a linked list then return the root node(coding).
4. Mention all the computer networks protocol.
5. Explain the OSI layers.
6. Difference between windows and linux.
7. different stages in the life cycle of an android activity

8. fibonacci using loops and recursion
9. database basics
10. reverse a character array
11. pascals triangle print
12. OS concepts
13. coding questions: stack implementation using linked lists and array;

Grey Orange Interview Questions

Firmware Profile

1. What is I2C? In which cases will you choose I2C and why?
2. If you're given a rotating disc and any sensor or components you want how will you determine the speed and direction or rotation?
3. If given a number pad of switches, let's say 9, and any microcontroller with infinite pins. How will you find out which button is pressed?
4. How is I2C better than SPI?

Hardware Profile

1. What is ADC?
2. Basic theory and equations behind LED?
3. Full Form of OpAmp?
4. What is sinking and sourcing?
5. How do you filter values coming from an accelerometer?
6. What is chebyshev filter?
7. What do you mean by ripple?
8. Basic Voltage Divider Circuit?
9. Represent a circuit in s-domain?
10. Is s-domain same as laplace?
11. Working of Force Sensitive Resistor?
12. Working of PWM?
13. Interfacing a device using PWM?
14. What is duty cycle?
15. How to read datasheet of an IC?
16. Basic OpAmp Circuits?

17. Implement a simple CPU using FSM?
18. How UART works?
19. Given there are two UART units that need to interface with each other. One unit has vcc = 3.3 other has 5v. How will you interface them?
20. Asked about the BTech projects and the past internships.
21. What is h bridge circuit? How is it operated?
22. How a DTMF works. Make a hardware circuit for that.
23. Make a hardware interface for GPS navigation system.

DirectI Interview Questions

<Software Development> Profile

Online Round:

1. 0-1 Knapsack problem. Given N food items with C[i] as calories and P[i] as the price, find the maximum number of calories you can gain in B rupees.
2. Balanced Parentheses problem. XML validation. Given a string containing opening and closing xml tags, find if it's valid
3. Dynamic Programming problem. There are 2 staircases A and B, you can at most jump K steps (i.e. move forward 1, 2, … or K steps) to the same staircase. Penalty for going from A[i] to A[j] would be A[j]. You can also move to the other staircase with additional penalty P, i.e. penalty from A[i] to B[j] would be B[j] + P. All the penalties add up. Reach the top of any stairs from bottom of any stairs with least penalty.

Algo Round 1

There are N points in 2D space with x from 0 to R-1 and y from 0 to C-1. Each point has one of the colors - red, blue, or green. Find triangle with largest area such that all 3 vertices of the triangle have different colors and at least one of the 3 sides is parallel to either X-axis or Y-axis.

Algo Round 2

There are N houses each having red or blue color. Each house has some magical number A[i]. A thief can enter from any house and exit from any house. (S)he initially has ₹1.

INTERVIEW:

You have 2 strings, anagrams of each other. Need to convert from string 2 to string 1, and the constraint is that you can shift any alphabet to the front only.

Operations Profile

Coding Round

1.) Write a script to emulate functions of crontab (user level process scheduling script in Linux). You are provided with a text file that's formatted in the following manner: <decimal value> <bash command>. Sample text file:

1. ps aux | grep -i init
2. df -TH
3. ls -al

…

Here, the decimal value is the interval after which the corresponding command is supposed to run. Taking above case as an example, df -TH must execute after every 2 seconds, ls -al after every 3 seconds and so on. Your script should parse this text file and do the aforementioned task. Output the result(s) of the command(s) on standard output (terminal).

2.) Handle stalls/starvation of processes, ie, a process should execute according to its schedule even if some other process has stalled.

3.) Real time changes: if the text file is changed while the script is running (basically, if you add/remove commands, change intervals etc), the script should also change the schedule accordingly (output should change, obviously).

4.) explain scheduling types

5.) explain filesystem organization

6.) http handshake

7.) heartbleed attack

8.) mac protocols

9.) how does ARP work

10.) list a few DMA devices

11.) If your system is getting slow how would you go about debugging it and possibly fixing it

Applications Profile

1. Given a tree. Every edge has a weight. Need to go from root to leaf, such that all paths have the same total weight/ path from root to leaf have same weight. Only possible operations are to increase the weight of one edge. Tell the minimum increment.
2. Find number of uni-valued substrees in a tree.
3. You have been given ‘n’ ranges, n upto 10^6. Need to find number of unique integers in the ‘n’ ranges.

Sumologic

1) Regex based questions: Matching strings, etc.
2) Implement a time travel map
3) In place reversing of a string
4) Given a an array of characters, find out if it can be broken down into meaningful words
5) Questions based on minheap
6) Build a minheap. Complexity based questions.
7) Given a tree, change the node values such that the value = node value+sum of children (Will be done recursively)
8) Given a dictionary of strings, and an input string, can you divide the string in such a way that all the strings in dictionary are present in the obtained divided strings.
9) Implement a priority queue using heap data structure.
10) Store a tree in a file and reconstruct
11) Print top K elements from stream of numbers (optimise space & time)
12) Print the n’th number in a lucky sequence where a lucky sequence is defined as: any number that has only multiples of 2, 3 and 5 as factors.

Practo Interview Questions

1. Given 2 sets find the intersection of 2 and put the elements in 3rd set.
2. In the above question put the elements(intersecting ones) in the 3rd set same number of times as appearing in the combination of both sets.
    a. a = {1, 2, 2, 3, 4}
    b. b = {1, 2}

    c. c = {1, 1, 2, 2, 2}
3. Given a string s, find a substring of longest length which is also a pattern in the original string.
4. SQL questions related to practo's database design. Like, Getting next five appointments for a patient based on a given recurring format from the current appointment date. Format can be: Once every week on the same date, or, number of days per week, or Once once a month on the same date, or, 1st day of the month, or, last day of the month.

MAKE MY TRIP Questions

Interview:

1. Asked for BTech Project
2. 25 horses, pick the top 5 and the constraint is you can race 5 at a time.
3. How can you design a flyover? What are the constraints to be handled in building a flyover(in general)?
4. Java based: Collections, interfaces, OOPS concepts(Real world scenario), strings, JBM, JRE,
5. Ball-Jar defective problem
6. Efficient Dynamic Data structure to store distance between cities
7. Producer Consumer threading problem
8. 2 ropes given, takes 60 minutes to burn a single rope, how to burn a rope in 45 minutes?
9. Red, blue cap people cannot see each other. Cannot see their own cap, but can see other's. Need to stand in a row with red together followed by blue or vice-versa.
10. Random playback of songs, no repetition of a songs before all other songs are played.
11. 3 switches, 1 bulb in the room, can enter a room once and need to tell which switch is the bulb connected to?
12. Multiplication of 2 big numbers.
13. Reversing a linked list,
14. Check for a BST
15. You are blindfolded. There are 10 coins on a table. 5 of them have head facing up, the rest are tails. You need to create 2 piles of coins (5 each) such that both have equal number of heads facing up.
16. You are given 2 very large numbers (such that they cannot be accommodated in any available data structure). You need to add these two numbers.
17. There is an array. Sort the numbers in O(N) complexity given that there is no boundation of space.

18. 10 jars, each having more than 10 balls and weight of each ball is 1g. 1 jar is defective and it has balls each of which weigh 0.9 gram. You are given a weighing machine which you can use only once, and need to tell which jar is defective. Balls can be added/removed from any jar.
19. Basket of 10 apples and there are 10 friends. Given an apple to each friend, and still you are left with one apple. How is it possible ?
20. 100 horses, select top 15 from them, with minimum number of races (don't use brute force)?
21. Code for Mergesort, but divide the array into 4 partitions.
22. Implement Priority Queue
23. Reverse linked list
24. 2d matrix of 0 and 1's. every row is sorted. find row with maximum 1's.
25. Edit distance problem: DP
26. Given an array of tower heights,
27. Given a BST, and a number, find pair of nodes whose sum is equal to that number.
28. 35 horses. 5 racetracks, top 5?
29. Mutex and Semaphore difference in application usage?
30. 9 balls, one is defective, and we have a weighing machine.Find the defective one in minimum iterations.
31. 5l bucket, 3l bucket and endless supply of water. We want 4l of water.
32. Detect loop in a linked list.
33. 2 elements of a BST are swapped. correct them.
34. There are 3 bags. one with 2 white balls, one with 2 black balls,and one with 1 white and 1 black. Randomly choose a bag, and draw a ball. ball is white. What is the probability that the next ball that i draw from the same bag is also white.
35. Using 1,9,9,6 exactly once, form 100 and 1000 using any number of operations.
36. Given two big numbers, write a function to add them. If you use linked lists to store those numbers, then consider the MSB to be at the head of linked list.
37. Implement a web crawler ensuring that same link is not visited twice
38. Storing data in a data warehouse based on user queries. Implement get and put functions in the most optimal way possible
39. Implement an algorithm to run 6 elevators simultaneously.
40. How do you implement a hashmap in java?
41. Difference between mutex and semaphore?
42. Difference between web server and application server? On a web server, you are getting client requests. How do you set a limit on number of requests that you get every second, minute, hour and day?
43. What are AVL trees, B+ trees?
44. External sort.

45. Cloning linked list having one random and one next pointer.
46. Maintain multiple stacks using a single array.

Cube26 Questions:

Interview:

1. Write a program to check whether a number is binary or not?
2. What are the different projects that you have done?
3. What are the courses you have taken? They can ask some questions about some terms and concepts of the subject.
4. What is an AVL Tree?
5. Convert a tree which is not AVL into AVL? Is it possible to do that?
6. Write SQL queries like “select person id’s having total salaries more than 1lac if 1 person can have more than 1 salaries”?
7. Which one is better merge sort or quick sort? What are there complexities?
8. Birthday Paradox question with some variations like how many persons are required in a room so that the probability of having two persons with same birthdays is greater than half?
9. Explain the heapsort algorithm?
10. Compare two telephone numbers optimally?
11. Give and explain O(n) sorting algorithms?
12. Given a string typed in QWERTY keyboard and a dictionary, output the closest word?
13. Best optimal way to store data of a tree? How to decode that data?(Huffman coding)
14. Puzzle about 25 horses and to find top 3 in minimum races?
15. Puzzle about 25 horses and to find top 4 in minimum races?
16. How to swap two values without using third variable?
17. Report all the single characters of a word?
18. Execute if and else of a condition? Tell a condition with which you can run both of them?
19. What is Red Black tree?
20. Explain the entire Android Life Cycle?
21. There is a loop in a linked list. How will you find out such a loop? How many nodes are there in the loop? What is the start node of the loop?
22. What is the best data structure for insert, delete, min and max finding?
23. What is Abstract keyword in java?
24. A string is given rotated about a point. Find if a given substring is part of original string?
25. How to find factorial of a very large number such as 1 million?
26. What are abstract data types?

27. Consider a closed room without any windows. It is raining outside. How will you get to know if it actually is raining outside?

Informatica Questions

Interview:

1. DFS traversal of tree
2. Auto pointer in C++
3. String concatenation using char* without using extra memory
4. Topics related to computer security
5. Const pointers
6. Implement sizeof without using inbuilt function
7. Detect palindrome in linked list with loop
8. JDBC
9. Shortest path in a matrix with 0's and 1's
10. Scheduling algo: Reverse priority
11. What is Normalization, Example, write code for heapify
12. Given a set of tasks, each with their deadline, cost and a task time of 1, schedule jobs such that total cost is maximised and a job is never scheduled after its deadline.(It is not necessary to schedule all jobs).
13. Given a large database of numbers, what is the most efficient way to store top 100 numbers ?
14. Minimum in a stack O(1)
15. Design an algo to normalize given relation database
16. Insertion in a BST using semaphore
17. Find the unique element in an array where except 1 element, all are repeated(any number of times).
18. Structure of locations, date, name, etc. Find frequency of locations.

Accolite

Written Test Questions:

1. Given two strings str1 and str2, find the shortest string that has both str1 and str2 as subsequences.
Examples:

```
Input:   str1 = "geek",  str2 = "eke"
Output: "geeke"

Input:   str1 = "AGGTAB",  str2 = "GXTXAYB"
Output:  "AGXGTXAYB"
```

2. Given an array of 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. So 3 2 7 10 should return 13 (sum of 3 and 10) or 3 2 5 10 7 should return 15 (sum of 3, 5 and 7).Answer the question in most efficient way.

3. there was a party.there was a log register in which entry and exit time of all the guests was logged.you have to tell the time at which there was maximum guest in the party.
input will be the entry and exit time of all the n guests [1,4] [2,5] [9,12] [5,9] [5,12]
the output will be t=5 as there was maximum 3 guest were there namly guest(starting from 1) 2,4 and 5.

Interview Questions:

1 (i)Given a Rod of Length L. find the maximum profit by dividing Rod in sub pieces. Given Piece Length and corresponding profit.

Length	Profit
1	2
2	3
3	5
4	7

(ii) find pieces which were used for getting maximum profit.

2. Given a 2 dimensional array. in which row and column both are sorted in ascending order. search an item in it.

3. Given two number in linked list.

(i) $3 \rightarrow 4 \rightarrow 5$
(ii) $4 \rightarrow 5 \rightarrow 8 \rightarrow 9$

Return third linked list which is sum of these two linked list.
Also, same question was asked separately to compute
list1 / list2 without using divide operator.

Answer :- 4 --> 9 --> 3 --> 4.

4. Design a syntax parser. asked approach only.

5. Given Two Linked list which are intersecting at some point. Find that node.

eg:- 3 → 4 → 5 → 6 → 7 → 8

|

10 → 11 → 12 hi

So node is 6.

6. A Old Phone is given. 1(abc) 2(def) 3(ghi)
4(jkl) 5(mno) 6(pqr)
7(stu) 8(vwx) 9(yz#)

And A dictionary is also given which consist of valid words.
So when a number is pressed say 235. It should show all valid words which can form from corresponding letters.

Note:- Its up to you how you build your dictionary.

7. A king have 1000 wine bottles. among them one bottle is having poisson. King have infinite number of slaves. That poisson is so much powerful such that even a single drop of it can kill in 6 hours.
So king wants to find out as minimum as possible slaves such that he will come to know that which bottle is having poisson.

8. Given an array from 1 to n contains has one missing no. and one duplicate find the nos.?

9. Given an array print all those values whose square root is present in this array.

10. An array contains 1's 2's and 3's only arrange them such that 1s are all in first part of array 2's are in next part and 3's in last part of array no extra space?

11. Implement queue using stack optimize.

12. Implement stack using queue.Also how do u keep track of minimum element in stack in constant time. Even after n number of pushes and pops.

13.. Given an equation x+5y+10z=480. Find x,y,z.

14.. There are 270 players. How many matches should be conducted before we declare a winner.

Digital Green:

Interview:

1. Project and internship related
2. Company/website understanding.
3. Asked about all the projects in round 1 and the way they were done, libraries used etc.
4. Given a billions of data , say of past 10 years. How will you store it and retrieve top 20% of it?
5. Asked for the better approaches of two of the questions that came in the written exam.

InfoEdge

Interview:

1) reverse a linked list
2) probability question
3) your project and its architecture
4) find unique word in a very long string of words
5) find minimum length substring which will contain all the unique words in th string given
6) optimal path in graph
7) HashMap
8) ordered unordered tuple in python
9) serialization and deserialization of objects in python
10) insertion sort
11) selection sort
12) multiprocessing , multithreading
13) kernel
14) find union and intersection of two arrays
15) implement your own string compare function
16) two trees given, same or not
17) lcm of three numbers
18) Hello World
19) Significance of return 0
20) O(1) time.
21) Anagram Check
22) Subtree
23) URL to tiny URL
24) Check if a number is perfect square (optimal solution)
25) Given a stream of words separated by spaces find the word whose occurrence is median of occurrence of all the words in stream
26) Build backend of a search engine (how will you store database, how will you optimize search on very big database and how will handle different search cases)
27) Write Quicksort
28) Find GCD of three numbers
29) Find the maximum length of the palindrome in the given string.
30) You are given 3 values namely :
    i) Loan Amount
    ii) Interest Rate
    iii) Number of Months
    Find the monthly repayment amount (EMI).
31) Find the median value in an unsorted array (without using sorting).
32)

EMC

1) local, global and static variable explain
2) call by reference and call by value
3) polymorphism, function overloading and operator overloading
4) threads
5) os structure
6) file system
7) linux stack

TCS RESEARCH INTERVIEW QUESTIONS

1. Questions based on projects in Pattern Recognition- Naive Bayes, SVM, Neural Networks.
2. Some questions on Probability and Statistics.
3. Data structures→ linked lists, DFS.
4. Linear Algebra.
5. Kalman Filter and Extended Kalman Filter.
6. What is rank, random variables, eigenvalues, null space, PCA, central limit theorem, Baye's theorem,PDF, CDF.
7. Optimisation, minimization of a function,
8. Machine learning→ neural networks, classifier-Linear and non linear, RBM's, K-nearest neighbour algo.
9. Projects

SANDISK INTERVIEW QUESTIONS

1. Write verilog code for mux, d flip flop
2. Draw module synthesized from given verilog code.
3. Static Characteristics of CMOS
4. Tripping point, impact of additional load on tripping point.
5. order of MOS transistor input, and impact on speed.
6. Level to pulse signal (Not pulse train)

7. mosfet basics equations
8. feed back syatem properties
9. bjt basics
10. High Pass,Low pass filter current and voltage charecteristic
11. intutive analysis of any circuit for analog.
12. dominant pole, phase margin, gain-bw product concepts
13. threshold voltage physics concept
14. current mirror

KPMG

- Group discussion - (facebook boon/bane, importance of sports)
- Resume based questions
- Computer Networks - OSI layers
- Computer security related questions
-

Trident

- group discussion
- Resume based questions
- Details about any internship/project

Zillious

1. How to reverse a linked list.
2. To check a palindrome in a linked list
3. To clone a linked list.
4. puzzle - russian roulette
5. puzzle - ant and triangle
6. find greatest number formed from permuting the digits of a number
7. find pair of numbers from an array such that their sum is k
8. To check if an array is a palindrome or not
9. An array is circularly rotated n times. You are given the circularly roated array. Find a given number
10. Puzzle - 10 bags containing balls . 9 bags have same weight and 1 bag has less weight. You have a single weighing machine and can weigh only once. Find the less weighted bag.