

Puzzles:

→ 4 tablets are put in a bag, 2 of A type and 2 of B type ~~and~~ but they look similar so there is no way to differentiate which tablet is of which type. Now, you must have 1 tablet of each type otherwise you will die. So, tell how you will choose 1 tablet of each type from 4 identical looking tablets.

→ You are given 2 match sticks and a lighter, and the sticks burn completely in 60 minutes each. You are made to enter a dark room. ~~Now you have to calculate 30 minutes, 45 minutes and 15 minutes~~ Now, how will you know that you were there in the room for - 30 minutes - 45 minutes.

→ You are given 9 balls ~~and~~ and a beam balance. 8 of 9 balls are of same weight and the 9<sup>th</sup> ball is heavier but all 9 look alike. In how many turns can you find the heavier ball.

- Same question <sup>but</sup> with 27 balls.

→ You plan to stay in a hotel ~~for 7 days~~. This hotel takes a single ring [○] in return for day's stay. You have  
○ ○ ○ ○  
one single ring  
two rings attached and 4 rings attached.  
You cannot break the chains and the hotel accepts only one ring per day. How will you pay everyday if you plan to stay there for 7 days.



→ You have 12 sheeps and you want to make compartments for the sheeps to stay. For the compartments you have 12 long bamboo sticks and 6 exactly half in size of the long bamboo sticks. How will you make compartments for the sheeps using the given bamboos?  
[Compartments must be covered from all sides and these ~~shape~~ can be of any shape].

→ You have one egg and there is a building having 100 floors. It's not necessary that if you drop this egg ~~and~~ from any height and it will break. But from a certain floor and that floor onwards the egg breaks on dropping. ~~from it~~ Find out that floor. Also the best and the worst case.  
- Same question but using 2 eggs.

→ Divide a circle into 8 parts using only 3 cuts.

### Case Study

→ You are supposed to find the number of installations done of the game Pokemon Go in Mumbai City. Design a strategy for that. Also, define 'active users' ~~to you~~ according to your strategy and count the active users. ~~also~~  
[It is supposed to be a guesstimate as actual ~~numbers~~ figures are not ~~are~~ given]

- ① Tell me about your project?
- ② What's WCF services? (since proj was based on it)
- ③ What's diff between WCF services & WCF REST?
- ④ Explain DB in your proj. Draw ER diag with primary key
- ⑤ What Normalization level ~~was~~ your DB was?
- ⑥ What kind of binding is used in Binding frontend & backend?

⑦ array[] = { 2, 4, 8, 1, 3, 7 }  
How to sort this in min complexity?

⑧ array[] = { 2, 4, 8, 1, 3, 7 }  
arrayb[] = { 2, 7, 5, 13, 18, 15 }  
Match both arrays & print all distinct values.

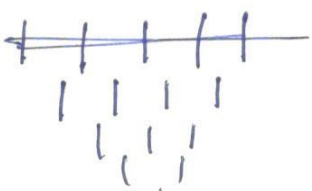
⑨ Print : 1 2 3 4 5  
          4 3 2 1  
          1 2 3  
          2 1  
          1  
          Complexity?

⑩ Print  
1  
3  
2  
4  
5  
7  
6  
8  
...

⑪ Indexing?

⑫ Features of Angular 2? (project based).

### Face to Face Aps:

- ① What is black when you buy, red when you use & grey when you throw it?
- ② Blue house built with blue brick, Red house with red bricks so green house with?
- ③  Revert this by moving min no stick.



Sophistic

④ 100 story building & unlimited supply of egg  
In minimum steps how will you find out  
from which floor ~~egg~~ if egg is throw, it  
will not break?

⑤ you have 5 lit bucket & 3 lit. bucket then  
measure 4 lit. (2 ways - First use 5 lit  
bucket first  
Second use 3 lit.  
bucket first)

⑥ Wife shoots her husband, holds him under  
water for 5 min, hangs him. & Later they  
both enjoy meal together. How?

⑦ Introduce yourself

⑧ Change WARM to COLD changing one  
letter at a time & each word should make  
sense

Ans - ① WARM → WARD → WORD → CORD  
↓  
COLD.

② WARM → WORM → WORD → CORD  
↓  
COLD.

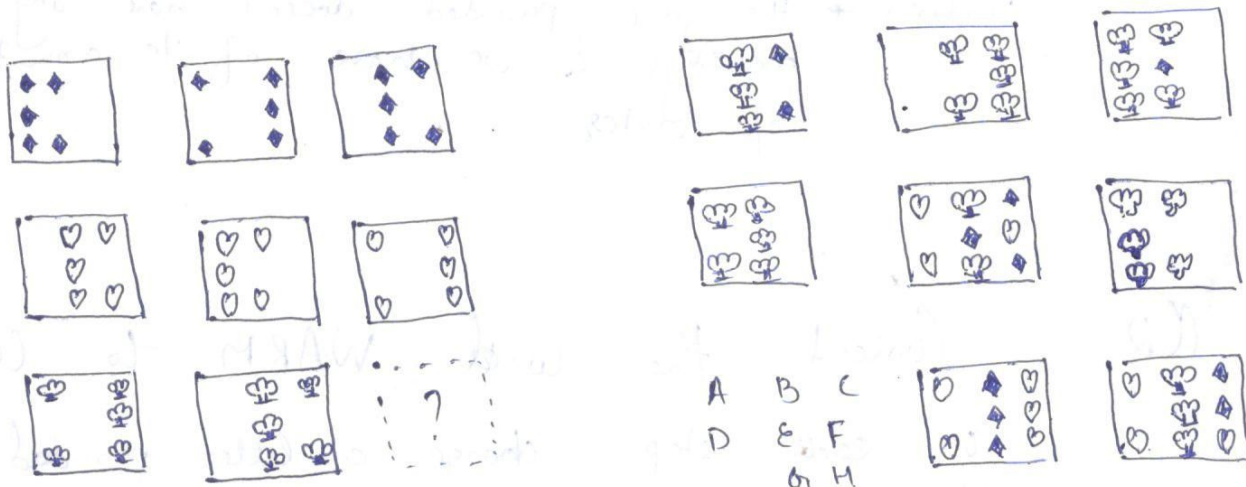
Prince Gaikewad

Softus Vista

3/8/2017

Round 1 → Written Aptitude

25 Questions ~~where~~ were asked on Pattern, like →



Sol →

Ans → F

If you observe in every row the, for every box the values are left shifted as you go from left to right

For example, the first row.



## Round 2 → Face to Face Aptitude

Q1 Given two jars of 6 litres & 11 litres.

We have to acquire 9 litres of water.

\*Condition → the jars provided doesn't have any markings & we have infinite amount of water.

Q2 Convert the word WARM to COLD,  
on each step change a letter provided  
after changing the letter, it makes sense.

Soln → WARM

→ WORM [A → O]

→ WORD [M → D]

→ CORD [W → C]

→ COLD [R → L]

④

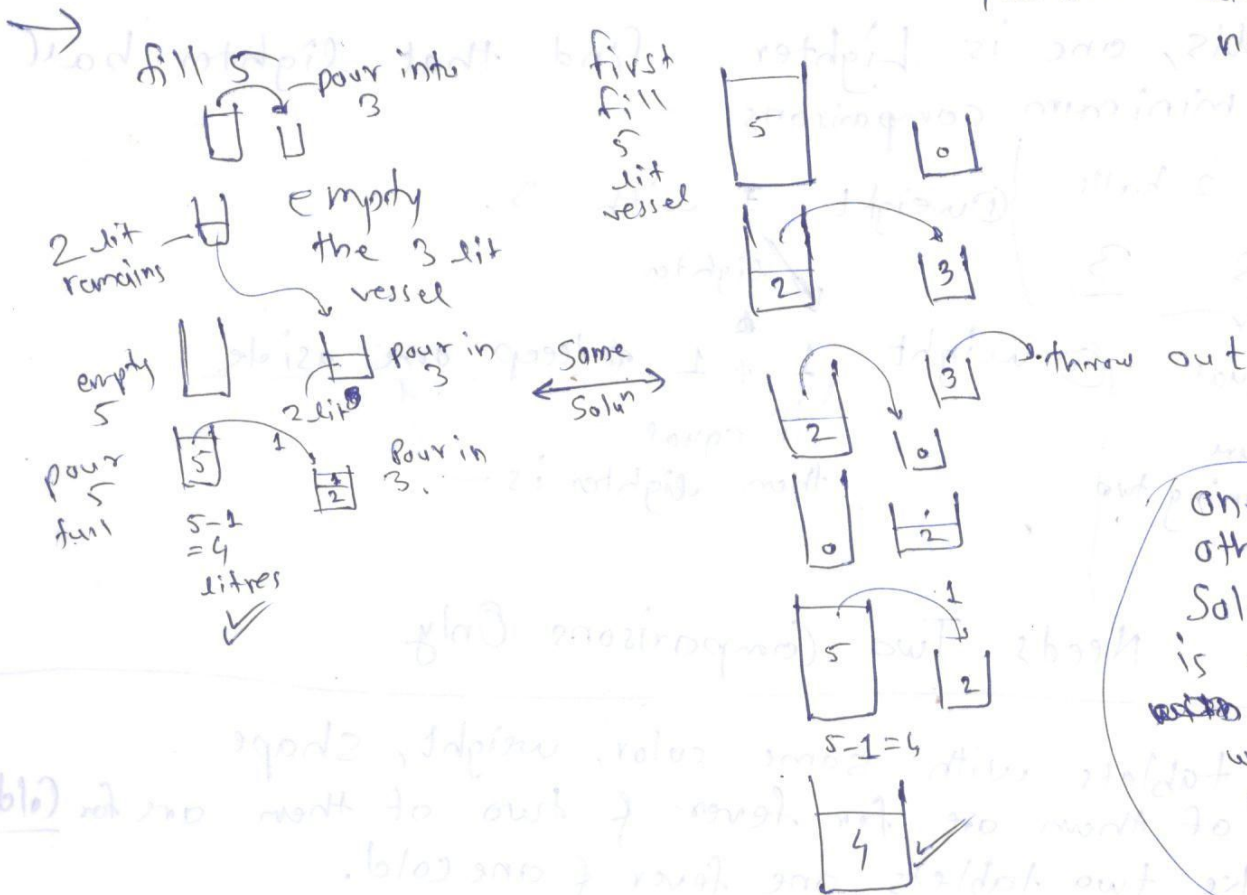
5 lit vessel      3 lit vessel

using these only

Count 4 liters

Use as much water you want

You can throw and fill & water ~~exhaust~~ any no. of times



One other Solu is there if ~~start~~ starting with 3 lit

⑤ 8 hrs in house, ~~doing same work~~

one cooking

2nd playing chess

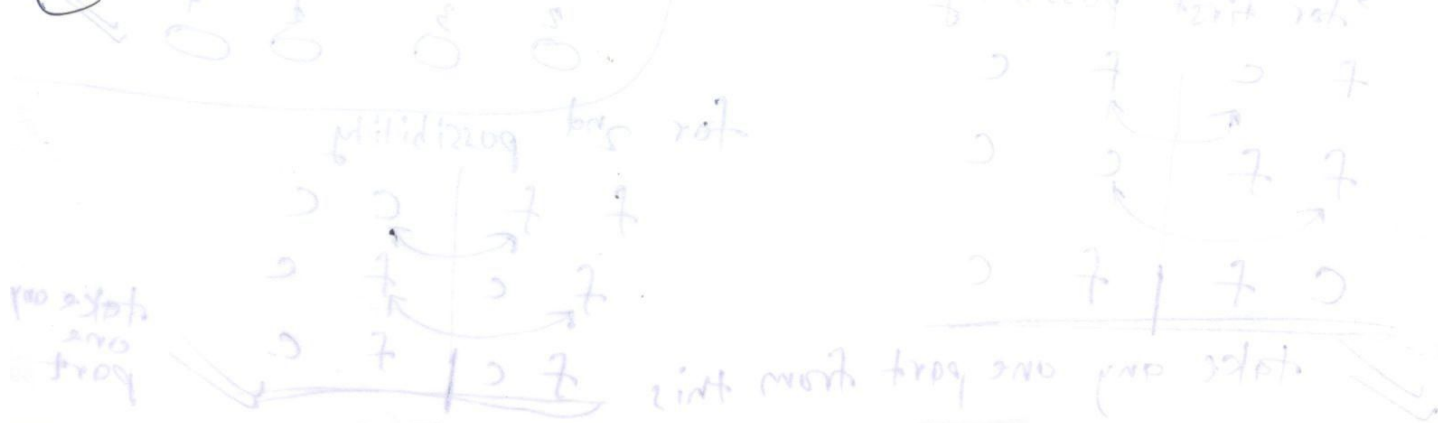
3rd reading

8th → what is he doing?

playing chess na bra

chess-to leoit akela ~~na~~ nai khel sakta.

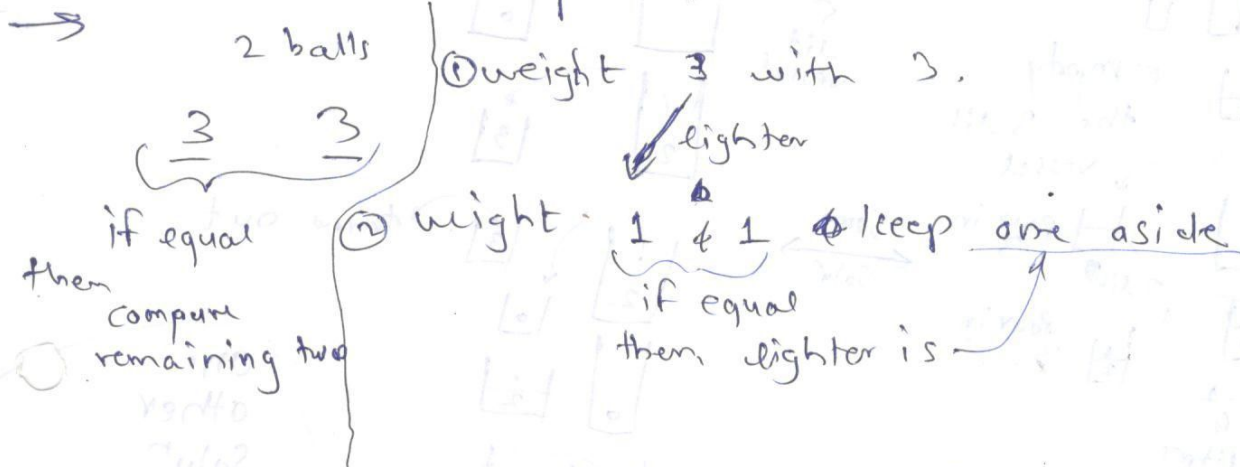
⑥





① 27 balls, one of them is heavier. find out that ball in minimum comparisons.

② 8 balls, one is lighter, find that lighter ball in minimum comparisons



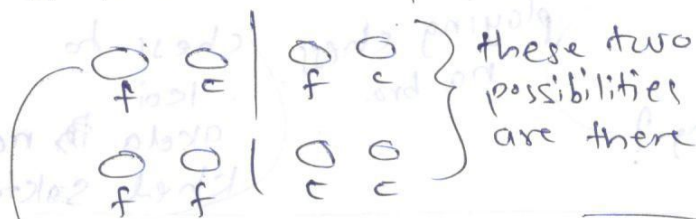
Needs Two Comparisons Only

③ four tablets with same color, weight, shape. two of them are for fever & two of them are for Cold. You need to take two tablets one fever & one cold. how you will take

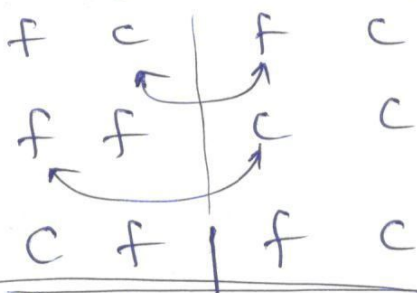
→

○ ○ ○ ○ } same in color, size, shape

divide in two parts

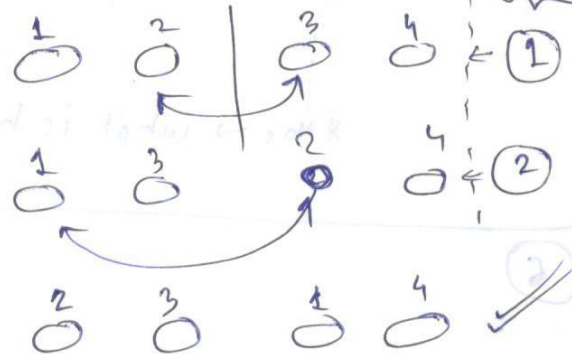


for first possibility

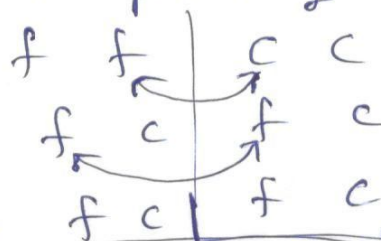


take any one part from this

~~sw~~ You need to swap steps



for 2nd possibility



take any one part

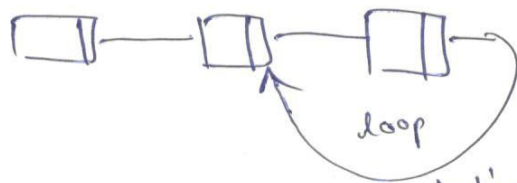


Soft us Vista . 3 Aug 2017

Lalit Zambore

- ① about project database schemas, keys, mappings, (How you access data from that)
- ② ~~project~~ what are you doing in your project  
(your business for which you designed project)
- ③ what are types of Indexes.
- ④ design database for e mart website  
How you think for having database for ~~an~~ e mart website.  
(my project was e-tour, still they asked me this)

- ⑤ How you find ~~link~~ center of linked list (singly)  
node list
- ⑥ How you find loop in linked list.



pointing to ~~same~~ some existing node in list itself

- ⑦ How you implement Snake & Ladder Game  
positions of snakes & ladders will be provided to you
- ⑧ How many tables you need for many to many mapping?
- ⑨ Normalization (4NF) for redundant data
- ⑩ How Index works? Important  
why need Index?  
~~Index~~

## Round 3

### Technical 1

Q1 → Tell me about your Project?  
\* One should know in detail about their project

Q2 → If ~~asked~~ said to design a Database for OLA or UBR how would you go about?

Q3 → Design Database for Student, Teacher & classroom management system.

Q4 → Asked about various types of constraints?

Q5 → Current version of MVC you're used in your Project.

### Technical 2

Q1 → Implement stack using Array in C#

Q2 → How to find middle of singly linked list in single traversal.

Q3 → Logic / Approach to solve snake and ladder problem.

Q4 → Upcasting and downcasting & why do we downcast?

Q5 → \*\* Fibonacci Series

Q6 →



Q3.

Misplaced labels

→ Given three boxes, which are labelled

"Apple", "Oranges", "Apples & Oranges".

And given <sup>only</sup> one chance to pick from any of the boxes.

Which one would you choose & how would you label them rightly?

Q4 → ST ND RD TH ?

Sol: → HINT → I + the last two letters of ~~word~~ a.

word  
⇒ TH  
→ FIRST

SECOND THIRD FOURTH FIFTH

Q5 → There is a small village, in which there

are two barbers. In the NORTH, there is a barber which looks like David Beckham, well

trimmed, & of perfect looking. While, in the SOUTH

there is a shabby looking barber, ~~which~~

→ Which barber would you go to cut your hair? and why?

\* NOTE → Both cut hair at same price & the place you distance between the