Zoho interview for 2 years Experienced Java

1st round was based on java and c, test consists of 30 conceptual questions to be completed in 90 mins. Questions like worst case of merge sort, static concepts, inheritance concepts, if space is an issue which sorting we will use, no of queue needs to be there to implement stack etc

2nd round was totally programming. In 3 hours we had to finish 5 questions.

1) Reversing the string without reversing the place of delimiters and dont use String manipulation.
2) Given a no, you have to tell whether the binary digits generated are palindrome or not. Array cannot be used.
3) Pattern generator if no given are even-
I/p-4

O/p-

4444

4334

4334

4444

I/p – 6

O/p-

666666

655556

654456

654456

655556

666666

4) To find the max path in a 2d array. You will start from the first element and you have to reach the last element. You can only go rightwards and downwards.

I/p-

10 20

4 3

O/p – path followed 10 – 20 – 3

Sum is 33.

Zoho Corp Interview Experience (On-Campus)

Round 1 (Written Test): Pen and Paper test on C & C++ Language and Logical questions (Quantitative Aptitude and Reasoning). C & C++ Language questions based on pointer, recursion (Duration-2 hrs)

C & C++ Language : C & C++ and 10 questions (1 mark each)

Advanced C & C++ Language : C & C++ and 10 questions(2 marks each)

Logical Questions : Quantitative Aptitude and Reasoning(1 mark each)

*Note: It was not a MCQ Test we have to write the Answers for every questions for C & C++ Language we have to write the output there was no negative marking for wrong answers.

Round 2 (Competitive coding): It was a offline test on our campus lab . it consists 5 questions. Even if you solve 3 you will get into next round. They want Clarity, Quality, Boundary Condition, Efficiency (Any Language you can use its on you).(Duration-3 hrs)

1 : https://www.geeksforgeeks.org/job-sequencing-problem-set-1-greedy-algorithm/
2 : https://www.geeksforgeeks.org/longest-increasing-subsequence-dp-3/

3 : https://www.geeksforgeeks.org/search-a-word-in-a-2d-grid-of-characters/\

4 : ATM Machine Problem given notes of 1000, 500, 100, 50, 20, 10(Number of notes given at the starting point and we have to N transactions if amount present return the amount present in ATM decrease count of notes and if not present then display "no sufficient amount")

5 : Given the Text and we have to find the Pattern

? ->means one characters are missing

* -> means multiple characters are missing

Example:

Text	Pattern	Output
baaabab	baaa?ab	TRUE
baaabab	b*ab	TRUE
baaabab	*ab	TRUE
baaabab	ba?ab	FALSE

*Note: Try to avoid built in function, try to use best approach .

Round 3 (Advanced Coding Round): My task was to implement "Chess Tournament" in which they gave four modules. implementation of all four modules are important. Given the number of players we have to conduct matches in pair we have to create a random method for match if 'player 1' wins gave 1 point else gave it to 'player 2' if there is a Tie then both 'player 1 ' and 'player 2' got 0.5 point if number of players are odd then the last one gets bonus point 1 we have to display the winner of each match with both player at every round we have to display score of every player, and we have to assign match according to there score and once two player played a match they are not allowed to play match in the same pair we have to display the winner of the "Chess Tournament" and also the cumulative score (bonus points are not allowed to add).(Duration-3 hrs)

A Technical team Member is there you can discuss if you have any problem they can explain problem to you if require.

They can ask anything from your code so prepared with all your concepts .'

Once i completed all modules i shown it to a Technical team Member, he asked me some questions from code, he wants me to explain the code i explain full code step by step with mentioning all the Object Oriented Programming Concepts. Then at the same place he asked me some question related to my Projects that done in my academics.some other questions from my resume, and also some HR Questions like (about family member, about parents occupation, native place)

*Note:Try to use Object Oriented Programming Concepts and Data Structure . your code should be clean can be easy to understand. try to show every module once you complete it, Intersection with member is very useful

Round 4(HR Interview): It was a very short interview round a HR member was there in the panel he asked me some questions about family and why i choose MCA after B.Sc., My Dream Company, where i want to see my self after 5 years, and are you comfortable in South India because i am from north, have you visited Chennai, What is service based company and what is product based company, then he asked if i have any question i asked few questions then he asked me to wait out side . (Duration- 15 minutes)

Zoho Interview Experience (On-Campus)

Round 1: Pen and Paper test on Aptitude and C, C++ Fill in the blanks (mainly focused on tracing Recursions and Pointers). Duration – 1:30 hrs

C and C++ 10 questions 1 mark each
Advanced C and C++ 5 questions 2 marks each
Aptitude 10 questions 1 mark each
Around 1500 students appeared out of which only 250 got selected for next round.

Round 2: Competitive coding in our campus labs offline. Duration – 3 to 5 hours

There are five questions to solve.Even if you solve 3 you will get into next round.Anyone can solve 2 questions so question selection is important here.They observe the following in code :

Quality
Modularity
Boundary test cases
Efficiency
The questions range is hacker-rank's medium level and some are easy.No language restriction but Java is preferred.Some invigilators won't accept to use inbuilt functions and libraries.

Round 3: System Design and Development.Duration – 3 to 5 hours

Our task was to implement Kanzo Interpreter .It's basically 5 Levels, in each level we have to build a module which leads to final task.

Modularity of code is very important
Cleanliness of code
Boundary Conditions
They won't expect complete implementation, they observe the approach.Chances for next round are very high if the mentor likes your code.Again language is not a restriction but Java is preferred and expected by them.

Zoho Interview | Set 1 (On-Campus)
First Round: (Aptitude written round)
This round consisted of two sections "Reasoning Aptitude" and "Technical Aptitude". Reasoning section was more like puzzles so do concentrate on

logical puzzles. Technical Aptitude dealt more with "operator precedence", "pointers", "iterations", "dynamic memory allocations".

Second Round: (Normal Programming round)
1.   Print the word with odd letters as

```
P     M
 R     A
  O  R
   G
  O  R
 R     A
P     M
```
2.   Given a set of numbers like <10, 36, 54,89,12> we want to find sum of weights based on the following conditions
    1. 5 if a perfect square
    2. 4 if multiple of 4 and divisible by 6
    3. 3 if even number

And sort the numbers based on the weight and print it as follows

<10,its_weight>,<36,its weight><89,its weight>

Should display the numbers based on increasing order.

3.   Save the string "WELCOMETOZOHOCORPORATION" in a two dimensional array and search for substring like "too" in the two dimensional string both from left to right and from top to bottom.

```
w     e     L     C     O
M     E     T     O     Z
O     H     O     C     O
R     P     O     R     A
T     I     O     n
```
And print the start and ending index as

Start index : <1,2>

End index: <3, 2>

4.   Given a 9×9 sudoku we have to evaluate it for its correctness. We have to check both the sub

matrix correctness and the whole sudoku correctness.

5.   Given a two dimensional array of string like

<"luke", "shaw">
<"wayne", "rooney">
<"rooney", "ronaldo">
<"shaw", "rooney">

Where the first string is "child", second string is "Father". And given "ronaldo" we have to find his no of grandchildren Here "ronaldo" has 2 grandchildren. So our output should be 2.

Third Round: (Advanced Programming Round)
Here they asked us to create a "Railway reservation system" and gave us 4 modules. The modules were:
1.   Booking
2.   Availability checking
3.   Cancellation
4.   Prepare chart

We were asked to create the modules for representing each data first and to continue with the implementation phase.

Fourth Round: (Technical Round)
Technical question which revolved around "data structures" and "OOPS"

Fifth Round: (HR round)
Some general hr questions asked mainly about our projects and about certifications if we had one.

Zoho Interview | Set 2 (On-Campus)
Recently Zoho visited for the campus placement. I would like to share my experience to geeksforgeeks because of which I got this offer. Thank you geekforgeeks ☺
Zoho On Campus Placement Process

1) First Round : Written

40 C output questions. 2 Hours.
30 1Mark and 10 2Mark questions. IT WAS NOT MCQ. The questions were challenging and covered all C concepts.

2) Second Round : Coding

Around 150 students shortlisted for this round. It was a local machine coding round. A staff will be assigned to a group of 5 students. He made note of the time took for solving each question. There was totally 7 questions and I solved 4 questions and did not complete the 5th question.

1) Alternate sorting: Given an array of integers, rearrange the array in such a way that the first element is first maximum and second element is first minimum.

   Eg.) Input : {1, 2, 3, 4, 5, 6, 7}
        Output : {7, 1, 6, 2, 5, 3, 4}
2) Remove unbalanced parentheses in a given expression.

   Eg.) Input : ((abc)((de))
        Output : ((abc)(de))

        Input : (((ab)
        Output : (ab)
3) Form a number system with only 3 and 4. Find the nth number of the number system.
Eg.) The numbers are: 3, 4, 33, 34, 43, 44, 333, 334, 343, 344, 433, 434, 443, 444, 3333, 3334, 3343, 3344, 3433, 3434, 3443, 3444 ….

4) Check whether a given mathematical expression is valid.

   Eg.) Input : (a+b)(a*b)
        Output : Valid

        Input : (ab)(ab+)
        Output : Invalid

        Input : ((a+b)
        Output : Invalid
I don't remember the 5th question.

3) Third Round : Advanced Coding
A matrix game was given with 5 rules. We were asked to implement each of the rules separately.

   R3 | - - - |
   R2 | - - - |

```
R1 | -  -  - |
   C1 C2  C3
```
Each of the 9 cells can either be empty or filled with an atom. R3, R2, R1 are the rays that originate from the left. C1, C2, C3 are the rays that originate from the bottom of the box.

Input : Position of the atoms and the rays that gets originated from the outside of the box.

```
Eg.) 3
    3 1
    2 2
    1 3
    3
    R3 C1 C3
```

Output : Print the box.
Rule 1:
A ray that has an atom in its path should print 'H' (Hit) If it does not have any atoms in its path, the ray should pass to the other side.

```
     C1     C3
 R3 | -  -  - | R3
 H  | -  X  - |
 R1 | -  -  - | R1
    C1  H   C3
```
Rule 2 & 3:
A ray that has an atom in its diagonal adjacent position should refract.

```
 H | -  -  - |
 H | X  -  - |
 R | -  X  - |
    R   H  R
```

Input rays: R1, R2, C3

```
 H | -  X  - |
 R2 | -  -  - | C3
   | -  -  - |
    R2     C3
```
Rule 4:
A ray that has atoms in both of the diagonal adjacent positions should reflect back.

Input ray: C2

```
 | -  -  - |
 | X  -  X |
 | -  -  - |
    R
```

Input ray: R2
```
   | -  X  - |
 R | -  -  - |
   | -  X  - |
```
Rule 5:
The deflection of rays should happen in the order of the input rays.

Input Rays: R3, R2, C1, C3
```
  H | -  X  - |
 R2 | -  -  - | C3
   | -  -  - |
    R2     C3
```
The final task was to implement these rules for dynamic matrix size.

Input : no of rows, no of columns
```
  Eg.) 4 4 (row & column)
     2 (No of atoms)
     4 4 (Position of atom)
     2 2 (Position of atom)
     2 (No of rays)
     R4 C2 (Ray number)
```

```
  H | -  -  -  X |
   | -  -  -  - |
   | -  X  -  - |
   | -  -  -  - |
       H
```
The final task was very confusing and it had to handle all the cases. There are chances for a ray to end at the starting position if the number of rows and columns are more than 5.

4) Fourth Round : Technical Interview
Basic questions from hashing, searching, sorting, JVM, OS, Threads. In-depth questions from the projects that I mentioned in my resume. So don't just add projects that you are not thorough enough to answer all questions.

And a simple puzzle : (x-a)(x-b)(x-c)….(x-z) = ? ⬚

5) Fifth Round : HR
General HR questions like why zoho, how do you see yourself after 5 years, why did you choose CS/IT stream, tell me about your leadership skills etc.

Zoho Interview | Set 3 (Off-Campus)
Hi!! I recently attended ZOHO off-campus drive.
ROUND 1: WRITTEN
APTITUDE(1 hr and 20 minutes-20 questions):
Problems on average, probability, time & distance, alligation&mixture,ratio, HCF & LCM and few a puzzles.

TECHNICAL(45 minutes-10 questions): Output for C questions. Practice questions in geekquiz.com and C output questions in geeksforgeeks.org. Questions in pointers, strings, matrix etc.

Nearly 60 students were selected out of 600 candidates. They didn't select the top 60. They had a cutoff and those who cleared the cutoff were called for the next round

ROUND 2: SIMPLE CODING(3 hours)

1. Write a program to give the following output for the given input

Eg 1: Input: a1b10
     Output: abbbbbbbbbb
Eg: 2: Input: b3c6d15
        Output: bbbccccccddddddddddddddd
The number varies from 1 to 99.
2. Write a program to sort the elements in odd positions in descending order and elements in ascending order

Eg 1: Input: 13,2 4,15,12,10,5
     Output: 13,2,12,10,5,15,4
Eg 2: Input: 1,2,3,4,5,6,7,8,9
     Output: 9,2,7,4,5,6,3,8,1
3. Write a program to print the following output for the given input. You can assume the string is of odd length

Eg 1: Input: 12345
    Output:
1   5

```
 2   4
  3
 2   4
1     5
```
Eg 2: Input: geeksforgeeks
     Output:
```
g               s
 e             k
  e           e
   k         e
    s       g
     f     r
      o
     f     r
    s       g
   k         e
  e           e
 e             k
g               s
```

4. Find if a String2 is substring of String1. If it is, return the index of the first occurrence. else return -1.

Eg 1:Input:
    String 1: test123string
     String 2: 123
     Output: 4
Eg 2: Input:
     String 1: testing12
     String 2: 1234
     Output: -1
5. Given two sorted arrays, merge them such that the elements are not repeated

Eg 1: Input:
     Array 1: 2,4,5,6,7,9,10,13
     Array 2: 2,3,4,5,6,7,8,9,11,15
     Output:
     Merged array: 2,3,4,5,6,7,8,9,10,11,13,15
6. Using Recursion reverse the string such as

Eg 1: Input: one two three
     Output: three two one
Eg 2: Input: I love india
     Output: india love I

19 cleared this round and they were called for the next round. The next round took place on the next day

ROUND 3: COMPLEX CODING(3 hours)

1) Design a Call taxi booking application
-There are n number of taxi's. For simplicity, assume 4. But it should work for any number of taxi's.
-The are 6 points(A,B,C,D,E,F)
-All the points are in a straight line, and each point is 15kms away from the adjacent points.
-It takes 60 mins to travel from one point to another
-Each taxi charges Rs.100 minimum for the first 5 kilometers and Rs.10 for the subsequent kilometers.
-For simplicity, time can be entered as absolute time. Eg: 9hrs, 15hrs etc.
-All taxi's are initially stationed at A.
-When a customer books a Taxi, a free taxi at that point is allocated
-If no free taxi is available at that point, a free taxi at the nearest point is allocated.
-If two taxi's are free at the same point, one with lower earning is allocated
-Note that the taxi only charges the customer from the pickup point to the drop point. Not the distance it travels from an adjacent point to pickup the customer.
-If no taxi is free at that time, booking is rejected

Design modules for

1)   Call taxi booking
Input 1:
Customer ID: 1
Pickup Point: A
Drop Point: B
Pickup Time: 9

Output 1:
Taxi can be allotted.
Taxi-1 is allotted

Input 2:
Customer ID: 2
Pickup Point: B

Drop Point: D
Pickup Time: 9

Output 1:
Taxi can be allotted.
Taxi-2 is allotted
(Note: Since Taxi-1 would have completed its journey when second booking is done, so Taxi-2 from nearest point A which is free is allocated)

Input 3:
Customer ID: 3
Pickup Point: B
Drop Point: C
Pickup Time: 12

Output 1:
Taxi can be allotted.
Taxi-1 is allotted
2) Display the Taxi details

Taxi No: Total Earnings:
BookingID   CustomerID   From   To   PickupTime   DropTime   Amount

Output:
Taxi-1   Total Earnings: Rs. 400

1   1   A   B   9   10   200
3   3   B   C   12   13   200

Taxi-2 Total Earnings: Rs. 350
2   2   B   D   9   11   350
These were just sample inputs. It should work for any input that they give.
Those who finished both the modules within 3 hours and if it worked for all the inputs they give, those candidates were given extra modules to work with.

Only 9 candidates made it to the next round

ROUND 4 : FIRST FACE-TO-FACE(TECHNICAL)
Questions were on project, c, oops concepts, DBMS and a few puzzles. They might ask you more on new scenarios relating to your project.

ROUND 5: SECOND FACE-TO-FACE(TECHNICAL)
Question were on c, c++, java(like threads, synchronization etc.), Discussion about questions from first, second and third round. He even asked me to solve a few questions from the first round. He gave me a few puzzles to solve

ROUND 6: FIRST GENERAL HR
General questions about my pros and cons and discussion on my resume(be thorough with your resume). She finally asked me if I had any queries.

ROUND 7: SECOND GENERAL HR
She asked me some family details and gave some scenarios and asked me to what I will do in such situations(like if I am given the power to change 3 things in india, what all will I change) and a few general questions.

Zoho Interview | Set 4

Round one:
Note: They have two patterns, for me they asked programming pattern, which is really tough.
Time: 2.15 hrs
40 Questions full of programming, first 10 questions have half mark, next 30 Questions have 1 mark, no Compilation Errors.
1) First 10 questions is to find the output of program which contains full of loops, loops inside loops.
2) Next 30 Questions has five parts
….a) To find the input of the program, output will be given.
….b) To find the error in logic and correct it, to provide the expected output.
….c) To find which two program gives the same result among given four programs.
….d) To find the loop condition for the desired output.
….e) To find the order of function in execution..

Round two:
Level One:
1) To find the odd numbers in between the range.
Input:
2
15
Output:

3,5,7,9,11,13

2) To find the factors of the numbers given in an array and to sort the numbers in descending order according to the factors present in it.
Input:
Given array : 8, 2, 3, 12, 16
Output:
12, 16, 8, 2, 3

3) To output the number in words (0-999)
Input: 234
Output: Two hundred and Thirty Four

4) To find the print the pattern:
Ip: n=5
Op:
1
1 1
2 1
1 2 1 1
1 1 1 2 2 1

5) A man his driving car from home to office with X petrol. There are N number of petrol bunks in the city with only few capacities and each petrol is located in different places For one km one liter will consume. So he fill up petrol in his petrol tank in each petrol bunks. Output the remaining petrol if he has or tell him that he cannot travel if he is out of petrol.
Input:
Petrol in car: 2 Liters
Petrol bunks: A B C
Distance from petrol each petrol bunks: 1, 5, 3
Capacities of each petrol bunk: 6, 4, 2
Output:
Remaining petrol in car is 5 liters

Level two:
1) Print the given pattern:
Input:
N= 3, M=3
Output:
X X X
X 0 X
X X X

Input:

N=4 M=5
Output:
X X X X
X 0 0 X
X 0 0 X
X 0 0 X
X X X X

Input:
N=6 M=7
X X X X X X
X 0 0 0 0 X
X 0 X X 0 X
X 0 X X 0 X
X 0 X X 0 X
X 0 0 0 0 X
X X X X X X

2) To find the number of groups and output the groups:
Explanation: To find the sum of the elements in the groups and that sum should be divisible by input X and the groups should be limited to range with X numbers.
If X is 3, then the group should have only 2 elements and 3 elements from the array whose sum is divisible by 3.
Input:
Array: 3, 9, 7, 4, 6, 8
X: 3
Output:
3, 9
3, 6
9, 6
3, 9, 6
No of groups: 4

Level three:
1) To output the given string for the given input which is an integer.
Input: 1
Output: A
Input: 26
Output: Z
Input : 27
Output: AA
Input: 28:
Output: AB
Input: 1000

Output: ALL

2) Input:
Number of elements in set1: 4
Elements are: 9, 9, 9, 9
Number of elements in set 2: 3
Elements are: 1,1,1
Output:
1, 0, 1, 1, 0
Input:
Number of elements in set1: 11
Elements are: 7,2,3,4,5,3,1,2,7,2,8
Number of elements in set 2: 3
Elements are: 1,2,3
Output: 7,2,3,4,5,3,1,2,8,5,1

Round three:
Real time programming and analysis:
Note: Showing output does matter need to show the output as soon as possible. And also need to solve the constraints very fast, since you know what you have done in your program. After finishing the program always explain the logic behind it and the constraints about the processing and how you solved those constraints to the technical people.
1) To form a structure which has few elements:

```
struct product {
  char productname[20];
  int product_price;
  int product_id;
}
```
Get the product name, price and id and display the product name and price in descending of the price.

2) For the same above structure, now add another structure which is the category. That category will have products in it.

```
Struct category
{
  char category_name[20];
  int cat_id;
}
```
According the category get the product name, product price and id, then display all the products category wise in descending order.

3) For the same structure which as category and product, get the category id from the user in the product structure and save to the category list. Then display them all in category wise.

4) A sheet full of data will be given with inventory stock list, which as different categories and different products as input with category capacity and product availability in the structure. Now we need to add a new category or new product with capacity and availability. Need to check whether the product availability is exceeding the category capacity, if yes the output rack is full or else tell how much free space is available and add the product to list.

5) Constraints in the above in question will be given, need to solve all the constraints, so that the Technical HR gets satisfied.

After these rounds, if they get satisfied, they will call you for Technical HR, followed by General HR. If you solved every single question and you were really fast in problem solving, then HR interview will be easy. Or else HR interview will be very tough especially the Technical HR (The Technical HR round as lots of logical questions)

Zoho Interview | Set 5 (On-Campus Drive)

Round 1:
Questions based on aptitude (10) and c program output (20)
Time 2hr.
Round 2:
5 problem given we have to solve at least 3
Program 1:
Help john to find new friends in social network
Input:
3
Mani 3 ram raj guna
Ram 2 kumar Kishore
Mughil 3 praveen Naveen Ramesh

Output:
Raj guna kumar Kishore praveen Naveen Ramesh

Program 2:
Input:

With the starting and ending time of work given find the minimum no of workers needed

Start time	end time
1230	0130
1200	0100
1600	1700

Output:
2

Program 3:
Find the union intersection of two list and also find except (remove even elements from list1 and odd elements from list2)
Input

List 1: 1,3,4,5,6,8,9
List 2: 1, 5,8,9,2

Union: 1, 3,4,5,6,8,9,2
Intersection: 1,5,8,9
Except: 1, 3, 5,9,8,2
Program 4:

Rotate the matrix elements
For 3*3 matrix
Input

1	2	3
4	5	6
7	8	9

Output:

4	1	2
7	5	3
8	9	6

For 4*4 matrix
Input:

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

Output:

5	1	2	3
9	10	6	4
13	11	7	8
14	15	16	12

Program 5:

Find the largest possible prime number with given no

Input
5
4691
Output:
9461

Round 3:
For one batch of people
Basic programs like pattern printing
1
22
333
4444
And
1
2 4
3 5 7
6 8 10 12

Others had app development
Scenario: text editor
Only 40 characters per line and words should be wrapped if they brake
Also perform insert delete operations

Round 4:
Tech hr: Topics revolved around OOPS and java thread and Ubuntu commands.

Round 5:
General hr: As usual stuffs like personal info and about projects and why zoho?

Zoho Interview | Set 6 (On-Campus Drive)

Zoho visited our campus in the month of July.

First round: 15 apti and 15 c output questions. No negative marking and no multiple options. Believe me, this is the only way to avoid people coming into the next rounds based on luck.
Second round: 5 programming questions, they were easy

Q1. Given dates in day,month, year order sort them.

Q2. Given a string of integers find out all the possible words that can made out of it in continuous order. Eg: 11112

ans: AAAAB
AKAB
AAKB
AAAL etc.

Q3: Find whether a given number is magic number or not. It is something which gives same digits even after cubing it.

Q4: something related to rotating an array.

Q5: Given two numbers and an operation either + or − , perform the operation.
Now remove any zeros if present in the two numbers and perform an operation. See if the result obtained is same or not after removing zero's in the original result.

Third round: 5 questions based on maze.

Q1: Given a matrix dimension find the shortest path between two points.

Q2: shortest path between two points and a monster is present. So we have to avoid the monster and take a shortest path or die.

Q3: print the maze step by step.

Q4: same as Q2 but trigger is present so we can take the trigger to shoot the monster anywhere in the maze.

Q5: this is the tricky part. There are many holes in between. we should avoid them and take the shortest path.

Fourth Round: Tech interview. Mostly who got selected to the interview got placed. Simple questions, puzzles, oops concepts, some general os and other computer science related questions.

Fifth round: Tech interview. Questions on projects,internship and again simple questions on oops, dbms etc.

HR round: This is just a formality.

Zoho Interview | Set 7 (On-Campus Drive)

Here is my experience in zoho campus drive. It was a two day process

Day 1:

Round 1: Written Test
One and half hour time containing 15 aptitude questions and 15 c programming questions.

In aptitude all topics like time and work, ratio proportion, mixtures, work , boats and streams, number sequences were touched. They were pretty easy.

When comes to C.. the questions were basically on finding the output of the given code.. u need to have strong fundamentals on pointers, strings, preprocessor directives, enums, unions and structures.

Round 2:

A 3 hour programming round. (offline method)
Once u complete a question , it shall be verified for given sample test cases and 4 or 5 pre verified test cases. To get the next question every test case has to be solved. The questions were challenging and explanation was good

the various questions were
1. Cyclic number verification
2. Sorting dates
3. write a code to solve given mathematical expression
4. generation of unique number from any random number
5. given a number u need to print all combination of aphabets for that number

the results were announced around night

Day 2:
Round 3:

pure programming round.

We were asked to design a code (its almost a game without any graphics)
the question shall be divided into modules and each shall be verified for 7 to 8 test cases. when first module is done only then u can get the second and important thing is all the modules are inter related.

our question was a dungeon game.

An adventurer, A monster, A trigger, A treasure, Pits these are the components.
The size and location shall be given in run time. Adventurer must reach treasure fast than monster else he dies (Hint: use absolute of distance)

around 5 to 6 modules were present and 3 hour time.

Round 4:

A hr interview along with 2 technical interviews

the unsolved questions related to apti or program in previous rounds shall be asked along with some puzzles, areas of interest, why zoho ?

once u clear third round there is a 75% probability that u are in.

Zoho Interview | Set 8 (On-Campus)

ROUND 1: Aptitude questions – both Quantitative aptitude and in programming. they were NOT MCQs

ROUND 2:
1. Arrange the numbers in descending order depending on the no. of factors available for each number.
I/P: {6,8,9}
O/P: {8,6,9} or {6,8,9}
Reason: factors of 8 (1,2,4,8), factors of 6 (1,2,3,6), factors of 9 (1,3,9).

2. Two strings of equal length are given print the mismatched ones.

I/P: a b c d e f g h i
    a b d e e g g i i

O/P: cd , de //when two char are mismatched they should be printed together.
    f , g
    h , i

3. Get a number and check whether its palindrome do not use arrays and string manipulations

I/P: 5

O/P: 101-Palindrome

Reason: binary representation of 5 is 101 & it is a palindrome.

I/P: 10

O/P: Binary representation of 10 is 1010 –Not a palindrome

4. For any given matrix find the path from the start to the end which gives the maximum sum. Traverse only right or down.

Example: starting index is 15 (left top) and ending index is 10 (bottom right)

15 25 30
45 25 60
70 75 10

O/P:15->45->70->75->10 sum is 215

5. [['Lava' , 'kusha] ,
['Rama' , 'Lava'] ,
['Lava ','Ravanan'] ,
['Abi' , 'Lava']]

First string is the child & the second string is the parent. Print the no. of grand children available for the
given I/P.

I/P: Ravanan

O/P: 2

Zoho Interview | Set 8 (Off-Campus Drive for Project Trainee)

First Round:

Written, pen paper based. The candidate has to write the output for C programs and basic aptitude questions. Total 30 questions. Test duration was of 3 hours.

Description:

There were altogether 20 questions from C programs and 10 questions from logical aptitude. Questions from C programming basically focus on pointers (single pointer and pointer-to-pointer) manipulation, 75% of questions from pointers and rest from arrays and strings manipulation. The questions from logical aptitude was of moderate level difficulty ranging from probability to speed distance time calculations. Both section same marks weightage. I solved 13 from C and 7 from apti.

Second Round:

They shortlisted approx 40 students for the second round. The mail came after 15 days from first round. It was coding round, programming questions on their laptops in groups of 10 students in each room. Test duration was of 3 hours. The test was on 1 Feb 2016.

Description:

There were 5 questions. The instructor will check the code after solving each question, they may ask for reducing time/ space complexity, be ready for it.

1. Spiral printing.

O/P
4444444
4333334
4322234
4321234
4322234
4333334
4444444

2. Sort the array alternately i.e first element should be max value, second min value, third second max, third second min. Eg: arr[] = {1,2,3,4,5,6,7} O/P: {7,1,6,2,5,3,4} Note: no extra space and time complexity should be less;

3. Print all the substring of the given string.

4. Print the numbers which are mismatched from two array. Arr1 = {a b c d e f g h i}
arr2 ={ a b d e e g g i i}, O/P- cd, de, f, g, h, i.

5. Print all possible combinations from the given string.

The candidate who solved at least four out five are selected for next advance coding round.

Third Round:
Third round was followed immediately after completion of second round. 50% candidates were selected for this round which consists of advance programming question. One full fledge project consist of 7 modules which has to be done on their laptops. Test duration was of 3 hours. Test was on 1 Feb 2016.

Description:
There was one question for each candidate.

1. Develop a railway project which consist of 7 requirements modules. The modules includes booking of railway tickets, cancellation, route option, fare calculations, allotting/dealloting berth, coach position.
Some other questions given to students were online billing and shopping. The instructor may ask to change the requirements run time, you should be ready for it.

Fourth Round:
Fourth round was followed immediately after completion of third round. It was face to face interview round in which technical and HR questions were asked. Interview duration was of 20 mins for each student. It was on same day.
Description:
This round consist of face to face interview, they asked questions from Java collection framework and core java. Questions related to course project was also asked. Finally, all the round were finished at 8 pm.

Zoho Interview Experience | Set 9
The interview took place for 3 days, consisting of 5 rounds. The procedure is as follows:

Round I: This round is a basic round as usual for any interview. It is an offline written test consisting of 40 questions i.e. 30questions related to c language and 10 on aptitude. The round was taken by

around 600 students. Only 72 got selected for the next round

Round II & III: The next two rounds have a set of questions to be coded in c language.

Round II has 11 questions i.e. 1(a)-1(f), 2, 3(a), 3(b), 3(c), 3(d). I did my best to reach up to 3(b) and qualified for the third round. Out of 72, 22 selected for the next round.

Round III is yet another round of coding. It started at 9:30am and continued till 9:30pm with a break of 1 hour for lunch. The total number of questions are not known but I finished till 5th question when I got a call for my TR round.

Round IV: This round is a typical technical round wherein I'm interviewed about my project details, my coding skills as well as my web designing skills. The questions were on Java, C, HTML, CSS, basic PHP.

Round V: It's a typical HR round where I'm asked to solve some logical puzzles. Some basic HR questions are asked along with few questions on Java.

Zoho Interview Experience | Set 10 (Off-Campus Drive)

The Following rounds were held.

Round 1: The first round was held on Jan 10, 2016. The round one contained 30 questions with a duration of 3 hours. There were 20 c apps and 10 logical apps. The c apps consisted of mostly of pointers. The remaining were questions from arrays loops and macro definitions and function calls.

Round 2: The remaining rounds were held on Feb 1, 2016. The round 2 was programming round with 5 questions.

Question 1: Given two sorted arrays output a merged array without duplicates.
Array1: [1, 2, 3, 6, 9]
Array2: [2, 4, 5, 10]
Merged Array: [1, 2, 3, 4, 5, 6, 9, 10]

Question 2: Given a sliding window of size k print the maximum of the numbers under the sliding window.
Example: Consider a sliding window of size k equals 3. Let the array be [3,2,7,6,5,1,2,3,4] the output should print 7 as the first output as first window contains {3,2,7} and second window contains {2,7,6} and so on and the final output is {7,7,7,6,5,3,4}

Question 3: Given a array with n elements print the number of occurrences of that number each number in that array. The order of number doesn't matter. You can reorder the elements.
Example : [2,1,3,2,2,5,8,9,8]
Output:
2-3
1-1
3-1
5-1
8-2
9-1

Question 4: Enter two strings from command line and check whether any substring present in first string that follows the pattern of second sting.. They asked to implement regular expressions for * and backslash without built in functions.

"abcd" "a*cd" answer : yes
"aaaa" "a*" answer : yes
"a*c" "a*c" answer:yes
"adsd" "ad" answer:no

Question 5: They gave a passage and the output should be printing out the number of occurrence of each word and the indices it occurs without using string matching

The passage given was "jana Gana Mana" and so on.. and we have to print number of jana and it's indices.i.e at which position it occurs.

I have completed first and 5th program. The programs were not of equal weight-age. 4th and 5th were given more weight-age. They gave importance with the way of approach. Another guy solved the first 4 programs but he is not selected because of his inefficient code. And I got selected

to the next round just because of the appropriate data structure and logic the applied.

Round 3:
This round contained of advance programing but the logics were easy but they gave more importance to the modularity, Object oriented approach and things like that. They asked to create a simple console based application for e commerce. Two user's admin and customer with different functionalities were given. The Customer has to buy items then if discount is applicable for that product he can redeem it and he can also view the Order history. The Admin can add new items and so on.

Round 4:
This round concentrated on technical interview and tested how deep you are goo in the subject. They tested whether I am good at what I have put on my resume. Two staffs interviewed me separately and it lasted for approximately 1 and a half hours.

Round 5:
This round was HR round and just the background details about myself were asked. It lasted for ten minutes.

Zoho Interview Experience | Set 11 (On-Campus)

It was an on campus recruitment.

Round 1:
It had 30 MCQ questions. (20 questions from C aptitude and 10 from general aptitude). It was a written round, which lasted for 2 hours.

Round 2:
It was a programming round, which had 6 questions. The questions were solvable if one has some basic knowledge on fundamentals of programming. It was not conducted in any online judges/tools. The code/output were verified manually. Those who solved 4 questions were selected. Also those solved 3 questions and got the approaches right for any other question were also selected.

Round 3:

It was application development kind of programming round where we were asked to develop any application which supports some list of use cases. We were asked banking application with 12 use cases. In this round, the design which we create and the object oriented concepts which we use were monitored. Preferably we were asked to use an object oriented language to code, but those were not good in C++ or java, were also allowed to use procedural language like C.

Round 4:
It was a face to face technical interview where the interviewer will test your understanding on basics of core subjects of CS. For those who were not from Computer science or Information technology department, they asked only fundamentals of programming and general aptitude, logic questions.

Round 5:
It was HR round. It was concluding round for formality. It was more like a friendly chat for me.

Zoho Interview Experience | Set 12 (On-Campus)

Recently ZOHO visited our campus for recruitment and i would like to share my experience.
Thanks to geeksforgeeks which contributed to most of my preparations..

Round 1 : TIME : 2hrs
I was expecting an aptitude written round .But they gave us 30 flowchart and asked us to go through each flowchart and the questions were based on the flowchart..Questions included finding the o/p of the flowchart , find the missing statement which when added produces the given o/p..If you concentrate and go through the flowchart it should be easy to crack the first round..

Round 2: TIME : 3hrs
They shortlisted 150 candidates from the first round..This was a programming round and consisted of straightforward questions..

1.Given two numbers a and b both < 200 we have to find the square numbers which lie between a and b(inclusive)

eg) i/p a = 20;b = 100;
    o/p 25,36,49,64,81,100
2.Alternately sort an unsorted array..

eg) i/p {5,2,8,7,4,3,9}
    o/p {9,2,8,3,7,4,5}
3. Given an array and a threshold value find the o/p

eg) i/p {5,8,10,13,6,2};threshold = 3;
    o/p count = 17
    explanation:

Number	parts	counts
5	{3,2}	2
8	{3,3,2}	3
10	{3,3,3,1}	4
13	{3,3,3,3,1}	5
6	{3,3}	2
2	{2}	1

4.a. Given two binary numbers add the two numbers in binary form without converting them to decimal value.

eg) a = 1010 b = 11001
    o/p 100011
  b.The two numbers were given in base n
        eg) a = 123 b = 13 n = 4
            o/p 202
5.Write a program to print the below pattern

for n = 6

	1	7	12	16	19	21
	2	8	13	17	20	
3	9	14	18			
4	10	15				
5	11					
6						

6.Given bigger NxN matrix and a smaller MxM matrix print TRUE if the smaller matrix can be found in the bigger matrix else print FALSE

7.Given two matrices a and b both of size NxN find if matrix a can be transformed to matrix b by rotating it 90deg , 180deg , 270deg if so print TRUE else print FALSE

8 In addition to the above question you have to check if matrix a can be transformed by mirroring vertically or horizontally to matrix b.

I solved 7 questions .. Those who solved more than 5 were selected for the next round.

Round 3 : TIME : 3hrs
About 50 – 60 were shortlisted .. This round was also a programming round..
Questions were based of matrix transformation.Each question was an extension of the previous question in some way..There were 5 questions .. I solved only 2 ⬜ But got selected for the next round , I think it was based on my performance on all previous rounds..

Round 4:
We had both HR and technical HR.
In technical HR if they found out that a candidate was not sure on some topic the candidate was asked questions on that topic for the rest of the round even after the candidate said he does not know that concept . In my case it was DBMS ⬜ The round also consisted of 3 puzzles ..they were easy to solve , i solved all of them..

In HR round we had a friendly chat ..They didn't want candidates who were willing to quit the job after a few years and go for higher studies(obviously)..I was asked about my family and my hobbies..

After round 4 we had to wait for almost 5 hrs before the results were announced..There were 2 packages x and x+y.. I was offered the x package mostly because i didn't do round 3 well but they said that if we prove ourselves during the internship they would change the package to x+y so looking forward to that ⬜

Overall it was a good experience and i really appreciate ZOHO team for the amount of effort they invested in the interview process each round was both challenging and enjoyable in its own way

Zoho Interview Experience | Set 13 (On-Campus)

The selection process is based on 5 rounds which lasted for 2 days. Round 1 and Round 2 held on the first day and the remaining rounds held on the second day.

Round 1

It contained 30 questions (20 C aptitude + 10 general aptitude). All the questions are in fill the blanks format. No MCQs.

Round 2

It contained 5 programming problems :

You're given an array. Print the elements of the array which are greater than its previous elements in the array.
Input : 2, -3, -4, 5, 9, 7, 8   Output: 2 5 9You should solve this question in O(n) time.
You're given an even number n. If n=4, you have to print the following pattern :44444334
4334

4444

If n=6, then the pattern should be like this :

666666

655556

654456

654456

655556

666666

You're given a number n. If write all the numbers from 1 to n in a paper, we have to find the number of characters written on the paper.For example if n=13, the output should be 18 if n = 101, the output should be 195
A number is called as binary-decimal if all the digits in the number should be either '1' or '0'. Any number can be written as a sum of binary-decimals. Our task is to find the minimum number of binary-decimals to represent a number.Input : 32Output : 10 11 11

Input : 120

Output : 10 110

You're given a string as an input. You have to reverse the string by keeping the punctuation and spaces. You have to modify the source string itself with creating an another string.
Input :A man, in the boat says : I see 1-2-3 in the sky

Output :

y kse, ht ni3 21ee slsy : a sta o-b-e ht nin amA

Level 3 : (Advanced programming)

We were asked to develop a mini-project 'Invoice Management' with the following modules :

1. Add a customer

2. Add an invoice

3. Add items to an invoice

4. List all customers

5. List all invoices

6. List all invoices of a customer

7. Display the full details of an invoice

Level 4: (Technical HR)

Questions were mostly based on Database Management. The other areas include Data Structures and Operating Systems. Some of the example questions are : What is referential integrity, Explain outer joins : Left outer join and right outer join, What are holes in OS etc..,

Level 5: (General HR)

Some blah blah questions.

They also give me puzzles while I was solving level 2 programming questions. After all these rounds

only 2% of people survived. Hope it helps all. Good luck.

Zoho Interview Experience | Set 14 (On-Campus)

The selection process consists of 5 rounds and there were almost 350 people came for the process.

Round 1:

This round consists of 15 c questions and 10 aptitude questions and won't be in MCQ format. Questions from c will be bit more difficult and it takes extreme understanding of c concepts to solve it. They will cover arrays, strings, pointers and functions mostly (90 % of questions). Focus on "output of c programs" in GeeksForGeeks and GeeksQuiz.

There will be 28 sets and if you go through all sets then it is more than enough to clear the test. When it comes to aptitude questions, they will ask basic questions and basic hands on at quants and logical will get you through. They will give more priority to c questions rather than aptitude questions. So, focus on c part more. I cleared 11 c questions and 3 aptitude questions. They called me after 1 week and believe me there were only 27 people cleared this round.

Round 2:

This round consists of 6 competitive coding questions and you need to solve at least 4 to get you through.

1) Given a number, convert it into corresponding alphabet.

Input Output
   1   A
  26   Z
  27   AA
 676   ZZZ
2) Given a Roman numeral, find its corresponding decimal value.

https://www.geeksforgeeks.org/converting-roman-numerals-decimal-lying-1-3999/

3) Write a program to print all permutations of a given string. Note here you need to take all combinations as well, say for the input ABC the output should be as follows:

Input: ABC
Output:
A
B C
AB AC BA BC CA CB
ABC ACB BCA BAC CBA CAB
4) Write a program to rotate an n*n matrix 90,180,270,360 degree.
https://www.geeksforgeeks.org/inplace-rotate-square-matrix-by-90-degrees/ is the solution for rotating a matrix 90 degree. For rotating the matrix 180,270,360 degree, u need to call the same method 2,3,4 times based on the input.

5) https://www.geeksforgeeks.org/reverse-words-in-a-given-string/

6) Write a program to convert a number into a mono-digit number.

Conditions:
a) You are allowed to add and subtract the consecutive digits (starting from left).
b) You are allowed to do only one operation on a digit.
c) You cannot perform any operation on a resultant digit of the previous operation.
d) Your code should also find if a given number cannot be converted to a mono digit number.

Input	Output
72581	7(2+5)81
	77(8-1)
	777
3962	cannot create a mono digit number

8 people cleared this round. They didn't see any optimization in this round. Simply, completing 4 or more questions will get you through to the next round. The interviewers helped us to find some rare corner cases too if we miss anything.

Round 3:
We were asked to design an application program for n*n tic-tac-toe game. Here, you are expected to code with proper standards and in a most optimized way. And, in this round you need to find all the edge cases and corner cases yourself. The interviewers won't help you if you miss anything. So, make sure you covered all the cases before showing output to the interviewers.

https://www.geeksforgeeks.org/implementation-of-tic-tac-toe-game/

Only 2 people cleared this round.

Round 4:

First of all, they asked me to explain the logic I have implemented for the previous application programming. Then, they asked me some oops questions, static keyword, difference between array list and linked list. Then they asked me to write a query for inner join, left join and right join. Finally, they asked me 2 puzzles to solve which are as follows:

1)https://www.mathsisfun.com/puzzles/hourglasses-2-solution.htmlz
2)
http://www.geekinterview.com/question_details/46800
It was only me who cleared this round and the other one didn't make it.

Round 5:

HR round is just for formality and they asked me some typical HR questions like tell me about yourself, why zoho, will you go for higher studies, your salary expectation and finally they selected me.

Zoho Interview Experience | Set 15 (Off-Campus Drive)

It was an off--campus drive. More than 1000 people appeared for the drive.

ROUND 1:

This round had 15 aptitude questions which were easy. The hint is you have to think logically and apply basic maths. And also 10 C output questions which were tough.
Only 15% of people survived for programming round.
Those who didn't clear first round went for Content Writing role.

ROUND 2:
This round had 5 easy programming questions.

1) Given an array, find the minimum of all the greater numbers for each element in the array.

Sample:
Array : {2, 3, 7, -1, 8, 5, 11}

Output:
{2->3, 3->5, 7->8, -1->2, 8->11, 5->7, 11->}
2) Find the largest sum contiguous subarray which should not have negative numbers. We have to print the sum and the corresponding array elements which brought up the sum.
Sample:
Array : {-2, 7, 5, -1, 3, 2, 9, -7}

Output:
   Sum : 14
   Elements : 3, 2, 9
3) Given a string, we have to reverse the string without changing the position of punctuations and spaces.

Sample: house no : 123@ cbe
Output: ebc32 1o : nes@ uoh
4) Given a 2D grid of characters, you have to search for all the words in a dictionary by moving only along two directions, either right or down. Print the word if it occurs.

Sample :
 a z o l
 n x h o
 v y i v
 o r s e
Dictionary = {van, zoho, love, are, is}

Output:
  zoho
  love
  Is

5) Given a string, change the order of words in the string (last string should come first).
Should use RECURSION

Sample: one two three
Output : three two one
Should solve atleast 3 problems……Around 30 students cleared this round.

ROUND 3:
This was an application development round. The application was TOLL PAYMENT PROCESSING . They insisted us to do it in a object oriented language. First they asked the design(what are all the classes and objects & what data structure do you use).

Application description:

There are 'n' number of points in a highway out of which some points collect toll.
Each toll has its own charging scheme according to the vehicles and whether or not they are a VIP user.
If they are VIP user, 20% discount apply.
If the vehicle passes 3 toll gates, it has to pay in all the 3 toll gates according to the scheme of respective tolls.
There were 4 modules.

1. Given the details of vehicle type, start and destination……display the total toll paid during the journey and print the amount after applying the discount.

2. Display the details of all the tolls…..like what are all the vehicles(vehicle number) passed that respective toll and the amount each vehicle paid……and the total amount charged in

that toll.

3. Display the details of all the vehicles …….like what are all the journeys did it take….the start and destination of the same……tolls it passed during that journey….amount paid in that journey…..and the total amount paid by that vehicle.

4. Assume the highway as a circular path……we have to find the short route and identify the tolls between that route and calculate the amount.

After this round , only 7 students survived for the next round.

ROUND 4:
It was a technical round.
It was more than an hour for me and it was very tough.

Questions were mainly on Java and DBMS.

How jdbc connects with database(steps)….why we need a driver to do that…and also he asked me to design that driver……how Resultset processes the result.

How will you query to get all people details from aadhar database….what are all the challenges?

And some queries on JOINS.

Asked me to solve some first round aptitude questions……and asked me about the previous programming rounds.

ROUND 5: GENERAL HR 1

Asked about my family, my project, my previous interviews i attended, my cutoff in HSC, do you smoke?, what is the salary of your father, what is your strength and weakness character-wise.

ROUND 6: GENERAL HR 2
Asked the same questions asked in HR 1….what went wrong in all the previous interviews….are you interested in higher studies….if not why?…..what is your long term goal.

Any finally 6 of us got selected 🙂

Zoho Interview Experience | Set 16

Round-1 (aptitude test)
This was unlike other aptitude tests. It contained output based questions. Questions were mainly based on logic and loops.

Round-2(coding)
They gave questions one after the other. Initially it was easy, then ,the difficulty level increased. The first one was to check whether a year is leap year and the last one was to sort numbers based on digits starting from most significant numbers. Eg: input-100 1 11 21 2 3. Output-1 100 11 2 21 3
Each question was a continuation of the previous one, so its good if code is written as function.

Round-3
This was also coding round. They asked us to develop a train reservation system. Here also each question was continuation to the previous one(better to write code as function).The task was to write a program to book a ticket, cancel, add to waitlist…. Some constraints were also given.

Round-4(personal interview)
They Asked about classes, private constructors, garbage collections, sql , puzzle(1,7,26,?)

Round-5
In this round, they asked about kernel, some puzzles , print letter 'X' using '*'.
An array contains values between 0 to n-1. Task is to find the duplicate numbers with time complexity o(n) and space complexity o(1). (Use hashing on the same array- add n to a value if the index has already been visited).

Zoho Interview Experience | Set 17

Round 1:

First round is a written test. This is different from the other company written tests which I had faced till now. This round consists of 20 C output questions and 10 aptitude (logical) questions. To clear this round one should have a deep understanding about the concepts of C programming language; mainly pointers, array and string manipulations, loops. We have 28 sets of C output questions available in the given link https://www.geeksforgeeks.org/category/program-output/. The other 10 questions not only consists of aptitude but also logical questions. To attempt the aptitude questions, we have http://www.indiabix.com/aptitude/questions-and-answers/. I think these two links is good enough to clear the first round.

Round 2:
This is a coding round. We are given 4 programming questions which have to be done in a very optimal way. To clear this round, one should attempt at least 3 programs.

1. Given an odd length word which should be printed from the middle of the word.
The output should be in the following pattern.
Example:

Input: PROGRAM
Output:
```
       G
      GR
     GRA
    GRAM
   GRAMP
  GRAMPR
 GRAMPRO
```
2. It is a program to implement Least Recently Used (LRU) concept. Given a key, if it is already existed then it should be marked as recently used otherwise a value should be stored which is given as input and marked as recently used. The capacity is to store only 10 key, value pairs. If the table is full and given a new key; the key, value pair which is not recently used should be deleted which gives feasibility to store the new key, value pair.

3. Given a few pairs of names in the order child, father. The input is a person name and level

number. The output should be the number of children in that particular level for the person given.
Example:
Input:
[
{Ram, Syam},
{Akil, Syam},
{Nikil, Ram},
{Subhash, Ram},
{Karthik, Akil}
];

Syam 2

Output: 3 (Syam has Ram and Akil in level 1 and in level 2 he have Nikil, Subhash, Karthik. So the answer is 3).

4. Given an array of positive integers. The output should be the number of occurrences of each number.
Example:
Input: {2, 3, 2, 6, 1, 6, 2}
Output:
1 – 1
2 – 3
3 – 1
6 – 2

Round 3:
This is an advanced programming round. The task is to develop an Invoice Management. The main focus in this round is in designing part. We should mainly focus on the data base part. How we are going to design the tables to store data and how we are going manage the data plays an important role. It is better to refresh DBMS concepts before attending the ZOHO placements. Techtud videos on DBMS in youtube helped me a lot to understand basic concepts of DBMS. Particularly, in this round think in the aspect of ER models (Tables, attributes, primary and foreign key etc).
After designing part they gave us two queries. Here, the coding part should be done in a very optimal way. Based on the query, from the data we stored, the result should be printed. I did in C

language but better to implement in any OOPS language.

Round 4:
This round is a face to face interview. I had been interviewed nearly one and half an hour. Nearly 45 minutes, they asked about my project which is done in Java using servlets. They asked to design all the database tables which I have used in my project. They asked about the extensions of my project and asked how I'm going to implement. They also raised a problem in my project and asked which concept I will use to solve the problem. Another 45 minutes they asked about some other TR questions, my family background and some HR questions.

Round 5:
This is just a formality round. They asked about the relocation, why you prefer ZOHO and some other basic HR questions. At last, only 4% of the people survived.

Zoho Interview Experience | Set 18 (On-Campus)

Number of days – 2

Total number of students applied – 250

Round 1:

15 C Output and 10 Normal Aptitude.
10 C Output– 1 Marks
5 C Output– 2 Marks
10 Normal Aptitude — 1 Mark

28 sets in geeks for geeks is more than enough for getting through this in addition to basic general aptitude competence. MAKE SURE YOU READ ALL THE 28 SET. Thats all i did and I found the test very easy. Question were mostly pointers, arrays, loops and strings. No questions had any sort of compile errors and most likely answers will be a single number or a string or
a character.
General aptitude consisted of age problems, speed, ratios etc. Normal level of competence would be enough to get through this. POINT TO NOTE :– The 2 mark C questions attend them first and double check them they will save your life and dont even

skip one set from geeks for geeks they are very very very good, cant stress this enough.
About 56 students cleared round 1 and round 2 started soon the

same day.

ROUND 2:

6 Programming question

1. Adding 2 numbers

GIven 2 huge numbers as seperate digits, store them in array
and process them and calculate the sum of 2 numbers and store
the result in an array and print the sum.

Input:
Number of digits:12
9 2 8 1 3 5 6 7 3 1 1 6
Number of digits:9
7 8 4 6 2 1 9 9 7
Output :
9 2 8 9 2 0 2 9 5 1 1 3

2.Given sorted array check if two numbers sum in it is a given

value
Input
Array = {1 3 4 8 10 } N = 7
output
true

3. Compiuting value of sin (x)
Input x = 30 n = 10
output = 0.5

Hint : The equation sin(x) = x – x^3 / 3! + x^5 / 5! – ….

4. Write function to find multipication of 2 numbers using +
operator You must use minimu possible iterations.

Input: 3 , 4
Output 12

5. Given array find maximum sum of contiguous sub array

{-2 -3 4 -1 -2 1 5 -3}

output 7 elements [4 -1 -2 1 5]

6. Given unsorted array find all combination of the element
for a given sum. Order should be maintained.

Input :
8 3 4 7 9 N=7
Output
{3 4 } {7}

PREPARATION :
Solve all the previous questions asked
Solve extras on arrays
Solve extras on matrix
solve extras on strings
Learn all Datastructures available in What ever language you
are using.
For me it is java so COLLECTIONS… Know every inch of it too.
CPP guys … basic DS and functions in algorithm header.

I solved all the questions, you would clear the round if you
solve minimum of 5 questions if you are from computer science
branch. For other branches they are a bit more lenient. 3 or 4
is enough.

Zoho Interview Experience | Set 19 (On-Campus)

Zoho is one of the esteemed company with a unique style of intake i.e it takes a candidate only on the capability and strength on C language and coding. Its tagline for intake is also that the candidate should be passionate about coding(programming).

Everyone from our college could attend, even with backlogs also. The only thing is he should be good at programming.

They said us to assemble at 9:00 AM

ROUND-1:
I expected to write the outputs of the program but the scene was different. They gave every question on loops and control flows.
They gave us 1hr 30 min to solve 45 ques.
22 ques were on loops and we should write the output from the program, each ques is the same routine. Next 23 ques were the flow charts and we need to write the output.
We are given rough sheets and they are taken back.
they gave us the results in the afternoon.

ROUND-2:
I was not selected for round 2, but of my friend shared his experience.
This round was coding round we are given systems and a C IDE. the invigilators give us the ques and we need to solve them one by one, after solving one we are given the next ques. each ques is interrelated somehow. after solving around 6 to 7 ques we are announced qualified fr the next round.

ROUND-3:
This round is an application development one of my friend was asked to develop an program such that accepts all the cases of the railway reservation. We need to handle booking, cancellation, user priority and no of seats left etc. almost we have 2 hrs or more to deal with that. my friend was unable to deal with it. all our program will be visioned by the members of Zoho.

ROUND-4:
They ask us several ques and test our programming knowledge.

ROUND-5:
After our 4th round they asked us to come to Chennai. there they take one more filtration and give us the call letter with a package of 6.5lakhs.

To ace this Zoho u need to be perfect with C language. At least 70% proficient. u need to leave everything at least for 6 months and practice coding. luck don't support u until the last round.

My classmate aced zoho, who was passionate about programming since 1st year of B Tech. She even got 100% in nptel exam conducted by iit on DS and coding, that is all. Overall its a great company with good growth. Don't give a try, put some effort and then try.Interview Experience | Set 21 (On-Campus)

Question 1 : Write a program to determine whether a given number can be expressed as sum of two prime numbers or not.

For example 34 can be expressed as sum of two prime numbers but 23 cannot be.

Question 2 : Take a 2 or 3 digit input number, reverse it and add it to the original number until the obtained number is a palindrome or 5 iterations are completed.

Input : n = 32
Output : 55
23 + 32 = 55 which is a palindrome.

Input : 39
Output : 363

Question 3 : Given a string, reverse only vowels in it; leaving rest of the string as it is.

Input : abcdef
Output : ebcdaf

Question 4 : Write a program to check if the given words are present in matrix given below. The words can be left to right, top to bottom and the diagonals (in top to bottom direction)

zoho_interview

Question 5 : Write a program to form lines using given set of words. The line formation should follow below rules.

i) Total characters in a single line excluding the space between the words and the favorite character should not exceed the given number.

ii) Favorite character is case insensitive.

iii) Words should not be broken up. Complete words alone should be used in a single line. A word should be used in one line only.

Input : Max char per line = 10
    Favorite character = 'o'
    Words : Zoho, Eating, Watching, Pogo
        Loving, Mango
Output : Watching Zoho
    Eating Mango
    Loving Pogo.

Zoho Interview Experience | Set 20

First, I would like to thank geekforgeeks for providing me with the previous interview questions.

I applied through employee referral. First round was held at a college in Thirunelveli on 8th January, 2017. It consisted of 20 C aptitude questions and 10 general aptitude questions. These questions concentrated on control flows. Good knowledge in loops and recursions is enough to clear this round. Since the questions were in C, We need to know the basics of pointers as well. Around 5000 people attended this round. And only around 50 people were selected for further rounds.

Second and third round, We were asked to solve simple algorithm questions. People who didn't do well were sent out on the spot. Questions were from Arrays and String manipulation. Around 10 people cleared this round.

Fourth round was technical HR. Since I am from Automobile Stream, He didn't ask many questions in coding. He asked a few puzzles. He was nice and helped me solve the puzzles.

Then I was sent to general HR. She asked why Zoho? Why didn't I try to get a job in the past 8 months after the completion of my degree? And salary Expectations. After this round They told me that they will contact me in two days.

Zoho Interview Experience | Set 21 (On-Campus)

Question 1 : Write a program to determine whether a given number can be expressed as sum of two prime numbers or not.

For example 34 can be expressed as sum of two prime numbers but 23 cannot be.

Question 2 : Take a 2 or 3 digit input number, reverse it and add it to the original number until the obtained number is a palindrome or 5 iterations are completed.

Input : n = 32
Output : 55
23 + 32 = 55 which is a palindrome.

Input : 39
Output : 363

Question 3 : Given a string, reverse only vowels in it; leaving rest of the string as it is.

Input : abcdef
Output : ebcdaf

Question 4 : Write a program to check if the given words are present in matrix given below. The words can be left to right, top to bottom and the diagonals (in top to bottom direction)

P	W	K	C	T
B	O	F	A	L
O	O	E	R	M
X	L	A	T	E
A	C	O	T	N

Example: BOX: (1,0)(2,0)(3,0)
          FOX: Not Found

Search For Following Words: POET, WOOL, MOUSE, CAMP, ROAM

zoho_interview

Question 5 : Write a program to form lines using given set of words. The line formation should follow below rules.

i) Total characters in a single line excluding the space between the words and the favorite character should not exceed the given number.

ii) Favorite character is case insensitive.

iii) Words should not be broken up. Complete words alone should be used in a single line. A word should be used in one line only.

Input : Max char per line = 10
       Favorite character = 'o'
       Words : Zoho, Eating, Watching, Pogo
              Loving, Mango
Output : Watching Zoho
        Eating Mango
        Loving Pogo.

Zoho Interview Experience | Set 22 (Experienced)
Only user-defined functions. No inbuilt functions at all.
No scanning for inputs, directly assign to vars.

Level 1: (2 hours – pen & paper)
1.Solve the equation X power Y with given values.

Example:
   Input: X=2, Y=-2
   Output: 0.25
2.Find the distance between two given points and round it to the nearest number.

Example:
   Input: (2,4)(4,10)
   Output: 6
3.Count the numbers of characters in the given string treating '$' as escape sequence. If '$' is preceeded by ", consider it as normal '$' and not the escape sequence. If " occurs, treat it as single ".

Example:
   Input: Hello$World$
   Output: 11
4.Given a 2D matrix, find the sum of all the elements.

Example:
   Input: [1 2 3]
       [4 5 6]

[7 8 9]
   Output: 45
Level 2:
Finish one question to get the next type. Total 5 questions. (3 hours – machine round)
1.Solve the equation (XpowerY/Z!) + (Z/(X!+Z)) with given values of X, Y, Z. X and Z cannot be negative.

Example:
   Input: X=2, Y=3, Z=4
   Output: 1
2.Batman, Spiderman and Superman are going to start a business. The total investment is 1000M$. Anyone can add new investment to their existing investment. They can transfer investments between themselves. The program should be in OOP style and should have a menu for user to do all operations. (Something similar to below example.)

Constraints:
   a.Total investment should always be
      equal to or lesser than 1000M$.
   b.Spiderman's investment should never
      exceed Batman's.
   c.Investment cannot go into negative.
   d.Display investments on each update.
Example:
   Input: batman = 300, spiderman = 250,
      superman = 100
   Output:
   batman - 300
   spiderman - 250
   superman - 100
   add 100 into spiderman
   sorry, spiderman cant have more
   investment than batman add 200
   to batman
   batman - 500
   spiderman - 250
   superman - 100
   add 500 to superman
   sorry, total investment cant
   exceed 1000.
I couldn't get the 3rd question as I ran out of time. Need to complete 3 questions to qualify for next round.

Zoho Interview Experience | Set 22 (Off-Campus)

I attended Zoho off-campus. I registered through a link i received from my friend who has friends in Zoho. For attending off-campus you need that registration link which is available to their employees.

First Round:
It was for 30 marks. 10 aptitude questions. 15(10- 1 mark question, 5- 2 mark questions) C output questions. Aptitude interms of difficulty is above average. Not like the easy aptitude you get in the companies which hire a bulk of students like TCS CTSetc. total time given was 2 hrs. For C aptitude practice from sites like 2braces.com it was very helpful.

I got shortlisted for the next round and i received a mail regarding that after 12 days.

Second Round(coding round):
We were given a total of 6 programs and 2 hrs time. The provided us with laptops. They had all frequently used IDEs for C, C++ and Java(turbo c++, netbeans, eclipse, editplus)

The questions were:

1) Find the minimum number of times required to represent a number as sum of squares.

$12 = 1^2 + 1^2 + 1^2 + 1^2 + 1^2 + 1^2 + 1^2 + 1^2 + 1^2 + 1^2 + 1^2 + 1^2$
$12 = 2^2 + 2^2 + 2^2$
$12 = 3^2 + 1^2 + 1^2$

Input: 12
Output: min: 3
2) Search a string in a given 2D matrix. And print its possible path.
allowed movements are right left up and down.

3) In a given pascal triangle find the possible triangles.

4) in a matrix find the number of rectangles filled with 1s.

Input: 0 1 1 0
        1 1 1 0
        0 0 1 1
        0 0 1 1

Output: 2.

5) There are n items each with a value and weight. A sack is filled with the weights. In other words there is an array with of length n having the values of the items arr[0...n-1] and another array with weight arr[0...n-1].
if a sack is to be filled with weight W find the minimum possible value subset.

Zoho Interview Experience | Set 23 (Off-Campus)

ROUND 1 – Written Test
There are many patterns for first round such as (Aptitude + C), (Flowchart + C)... For me, it is Flowchart + C.
If you are good at dry run you will surely clear this round. Problems consist of complex loops and nested loops.
Mostly we need to predict the output and statements which would give the desired output. There will be no multiple choice questions.

ROUND 2 – PROGRAMMING ROUND – 1

Try using C language. Because for me they didn't allow languages other than C.

1. Find the maximum of three numbers?

2. Print the total number of odd and even digits in the given number.

  Ex. Input : 1234567

   Output : ODD 4
       EVEN 3

3. Find the second maximum among the given numbers.

  Ex. INPUT :

   Size of Array   : 8
   Enter the elements : 2 5 1 6 2 6 7 10

  OUTPUT :

   7

  Ex. INPUT :

   Size of Array   : 4
   Enter the elements : 4 1 2 2

  OUTPUT :

   2

  Ex. INPUT :

   Size of Array   : 1
   Enter the elements : 1

  OUTPUT :

   No second maximum

4. Print the following pattern

  Ex. INPUT : 5

  OUTPUT :

     1
     1 1
     1 2 1
     1 3 3 1
     1 4 6 4 1

  Ex. INPUT : 7

  OUTPUT :

     1
     1 1
     1 2 1
     1 3 3 1
     1 4 6 4 1
     1 5 10 10 5 1
     1 6 15 20 15 6 1

5. Given a two dimensional array which consists of only 0's and 1's. Print the matrix without duplication.

  Ex. INPUT :

Enter Row Size   : 4
Enter column size : 3
Enter the matrix :
1 0 1
1 1 0
1 1 1
1 0 1

OUTPUT :

Unique Matrix :
1 0 1
1 1 0
1 1 1

6. Given an array of positive numbers. Print the numbers which have longest continuous range.

 Ex. INPUT :

  Enter array size : 8
  Enter arryay elements : 1 3 10 7 9 2 4 6

  OUTPUT :

  1 2 3 4

 Ex. INPUT :

  Enter array size : 8
  Enter arryay elements : 1 3 9 7 8 2 4 6

  OUTPUT :

  1 2 3 4
  6 7 8 9

7. Given two arrays. Find its union.

 Input :

  Enter size of first array : 6
  Enter the elements   : 1 2 3 4 5 3
  Enter size of second array : 4
  Enter the elements   : 1 2 7 5

  OUTPUT :

  1 2 3 4 5 7

8. Given an array of numbers. Print the numbers without duplication.

  INPUT :

  Enter the array size : 4
  Enter the elements : 1 1 2 4

  OUTPUT :

  1 2 4

9. Given an array of numbers and a number k. Print the maximum possible k digit number which can be formed using given numbers.

  INPUT :

  Enter the array size : 4
  Enter the elements : 1 4 973 97
  Enter number of digits : 3

  OUTPUT :

  974

  INPUT :

  Enter the array size : 6
  Enter the elements : 1 4 89 73 9 7
  Enter number of digits : 5

  OUTPUT :

  98973

10. Given an array of numbers and a window of size k. Print the maximum of numbers inside the window for each step as the window moves from the beginning of the array.

  INPUT :

  Enter the array size : 8
  Enter the elements : 1,3,5,2,1,8,6,9
  Enter the window size : 3

  OUTPUT :

  5 5 5 8 8 9

ROUND – 3 ADVANCED PROGRAMMING

1. Given a MxN matrix filled with '-' and you need to drop the balloons in the desired columns starting from the bottom. You need to print the matrix when a new balloon is dropped.
You need to continue getting inputs until the box is full or until the user chooses to stop.

 TEST CASE :

 Enter the matrix size(m*n) : 3 3
 Enter the column number   : 2
 Enter the color of the balloon : R
 Contents of the matrix   :
 - - -
 - - -
 - R -
 Do you wish to continue(Y/N) : Y
 Enter the column number   : 2
 Enter the color of the balloon : B
 Contents of the matrix   :
 - - -
 - B -
 - R -
 Do you wish to continue(Y/N) : Y
 Enter the column number   : 1
 Enter the color of the balloon : R
 Contents of the matrix   :
 - - -
 - B -
 R R -
 Do you wish to continue(Y/N) : Y
 Enter the column number   : 2
 Enter the color of the balloon : R
 Contents of the matrix   :
 - R -
 - B -
 R R -
 Do you wish to continue(Y/N) : N
 Program Stopped
2. Extended version of the previous problem. Now you need to quit when a row become filled completely.

 TEST CASE :

 Enter the matrix size(m*n) : 3 3
 Enter the column number   : 2

Enter the color of the balloon : R
Contents of the matrix   :
- - -
- - -
- R -
Do you wish to continue(Y/N) : Y
Enter the column number   : 2
Enter the color of the balloon : B
Contents of the matrix   :
- - -
- B -
- R -
Do you wish to continue(Y/N) : Y
Enter the column number   : 2
Enter the color of the balloon : R
Contents of the matrix   :
- R -
- B -
- R -
 Column is filled completely. Program is terminated.
3. Extended version of the previous problem. Now you need to drop balloon in the first free cell from left if the specified column is filled in every row.

 TEST CASE :

 Enter the matrix size(m*n) : 3 3
 Enter the column number   : 2
 Enter the color of the balloon : R
 Contents of the matrix   :
 - - -
 - - -
 - R -
 Do you wish to continue(Y/N) : Y
 Enter the column number   : 2
 Enter the color of the balloon : B
 Contents of the matrix   :
 - - -
 - - -
 B R -
 Do you wish to continue(Y/N) : Y
 Enter the column number   : 2
 Enter the color of the balloon : R
 Contents of the matrix   :
 - - -
 - - -
 B R R

Do you wish to continue(Y/N) : Y
Enter the column number : 2
Enter the color of the balloon : R
Contents of the matrix :
- - -
- R -
B R R
Do you wish to continue(Y/N) : Y
Enter the column number : 2
Enter the color of the balloon : B
Contents of the matrix :
- - -
B R -
B R R
Do you wish to continue(Y/N) : N
Program terminated.

4. Extended version of the previous problem. If any column has three continuous balloons of same colors then we need to burst them.

TEST CASE :

Enter the matrix size(m*n) : 3 3
Enter the column number : 2
Enter the color of the balloon : R
Contents of the matrix :
- - -
- - -
- R -
Do you wish to continue(Y/N) : Y
Enter the column number : 2
Enter the color of the balloon : R
Contents of the matrix :
- - -
- - -
R R -
Do you wish to continue(Y/N) : Y
Enter the column number : 2
Enter the color of the balloon : R
Contents of the matrix :
- - -
- - -
R R R
Do you wish to continue(Y/N) : Y
Enter the column number : 2
Enter the color of the balloon : R
Contents of the matrix :
- - -
- R -

R R R
Do you wish to continue(Y/N) : Y
Enter the column number : 2
Enter the color of the balloon : B
Contents of the matrix :
- - -
R R -
R R R
Do you wish to continue(Y/N) : Y
Enter the column number : 2
Enter the color of the balloon : R
Contents of the matrix :
- - -
R R R
R R R
Do you wish to continue(Y/N) : Y
Enter the column number : 2
Enter the color of the balloon : R
Contents of the matrix :
- - -
R - R
R - R
Do you wish to continue(Y/N) : N
Program Terminated.

5. Extended version of the previous problem. Now you need to burst the three continuous colors in the same row.

Technical HR
The number of technical HR rounds may vary depending on your performance in the previous HR rounds. Some of them were sent to incubation if they weren't convincing for the HRs.

Questions were from Java, Data structures, approach for the given scenario, databases, and logical apps.

General HR
Simple questions like why Zoho, any other current offers, about Zoho, about family, why did you choose CSE, higher studies,…

Zoho On Campus Drive | Set 24 (Software Developer)

Zoho had visited our college to recruit software developers. There were two types of salary package offered and also internships.

These were the rounds:

Round 1 – Online Test
There were 30 questions. 15 aptitude and 15 coding related (from C)

Aptitude was quite simple but the coding questions were really challenging.
The cut-off was pretty high as this was a round meant for mass filtering.

Round 2 – Coding

This was a hands-on coding round with 8 questions.
You could use C, C++ or JAVA

Most of the questions were easy:

Given 4 integers as input. Find whether they would form a rectangle, square or none.
Insert an element at a particular index in an array.

Some were average:

Given a large number convert it to the base 7.
Given an IP address validate it based on the given conditions.
Sort parts of an array separately using peak values.

Some were a bit challenging:

Given an input array, find the number of occurrences of a particular number without looping (use hashing)
Diamond pattern printing based on some conditions
Given an array of characters print the characters that have 'n' number of occurrences. If a character appears consecutively it is counted as 1 occurrence
Eg: a b a a b c c d e d
Here a has only 2 occurrences

Round 3 & 4 – Advanced coding:
In these rounds we were asked to implement the logic for 2 games
– Minesweeper
– Breakout a.k.a. Arkanoid a.k.a. Brick-Breaker
(you'll find it online)

The game was split into various stages and we were asked to implement the logic stage by stage.

Interviews:

A few interviews followed. Some of which was just to get to know you. One interview had a few puzzles. And one was an official interview with a lead HR from Zoho

Those who did really well got the higher package and those who just missed it also got the job with a lower package.
Some were offered internships.
Overall it was a challenging process. Those with strong logical and coding skills would make it 🙂

Zoho On Campus Drive | Set 25 (Software Developer)

Zoho visited our college to recruit people for software developer role in September 2017. There are two types of packages offered.

Round 1: Written Test

The first round has 30 questions with 2 sections.Section A is technical aptitude from C on predicting outputs.Major Topics covered in C language are Pointers and arrays. Section B has some logical aptitude questions and few from quantitative aptitude.

Round 2: Coding Round

Five coding questions were asked to do in any of the Programming language C, C++, and Java.

some of the questions are:

1)Evaluate given expression which has factorials and exponential terms.

2)To implement snake and ladder game for given two-dimensional array having position of snakes and ladders

3)To calculate strength of the password string using some predefined rules given in the question

4)Given four points, We have to say whether it is square or rectangle or any other shape

Round 3: Advanced coding round
One coding question is asked.The question is to implement the mail server.They checked for data structures used to solve the problem, authentication method and some basic things like logout, send, and login modules

Round 4: Final Interview
The final interview has both technical and HR questions.Basics of OOPS were asked in the interview.Concentrate on scenario based questions.

Finally, 13 people have selected for the Software developer role out of 1200 candidates appeared for the written test. All the 13 people were offered intern for the period of 6 months.

Zoho Off Campus Drive | Set 26 (Software Developer)

Round 1: Written test

The first round comprised of 40 one mark questions (without options) from C output questions and flow chart questions (Test Duration: 2 hour) :-

C output questions part covered questions from iterations, pointers, array and data structures.

Suggestion: I would suggest to do quizzes from geeksforgeeks to get in touch with all concepts of C and other subjects.

Tips :- Solve the questions with calm mind. Don't stress yourself during test because you have to do 40 questions in 120 minutes. Don't spend too much time on any question if you are not able to do it in the first attempt.

Round 2: Coding round

You will be provided laptop and turbo C compiler. Java and C++ not allowed for second round.

Some of the questions are.

1. Print second frequently occurring number in given series

Example :

Input: 1 1 2 3 1 2 4
Output: 2
Explanation: 1 occurs 3 times, 2 occurs 2 times, 3 occurs 1 time and 4 occurs 1 time. Hence second frequently occurring number in given series is 2

2. Print only numbers which is present in Fibonacci series (0 1 1 2 3 5 8 ....)

Example:

Input: 2 10 4 8
Output: 2 8
Input: 1 10 6 8 13 21
Output: 1 8 13 21
3. Print pattern like this

Example:
Input: 1
Output: 0

Input: 2
Output:
0 0
0 1
1 0
1 1

Input: 3
Output:
0 0 0
0 0 1
0 1 0
0 1 1
1 0 0
1 0 1
1 1 0
1 1 1
4. NxN matrix will be provided. 0->block, 1->Not a block

Always starting point is (0,0), Ending point is (N-1,N-1).
You have to go from starting point to ending point.
One valid solution is enough.
Example:

```
Input:
N=4
1 1 0 0
1 0 0 1
1 1 1 1
0 0 0 1
Output:
_ 1 0 0
_ 0 0 1
_ _ _ _
0 0 0 _
```

5. Insert 0 after consecutive (K times) of 1 is found.
Example:

Input:
Number of bits: 12
Bits: 1 0 1 1 0 1 1 0 1 1 1 1
Consecutive K: 2

Output:
1 0 1 1 0 0 1 1 0 0 1 1 0 1 1 0
Round 3: Advance programming round

You have to code for Railway reservation system.

(Test Duration : 3 hours)

Round 4 and 5: Interview (technical and HR)

In technical interview some puzzles and programming questions were asked.

In HR interview some basic HR questions were asked.

Finally 3 got selected for extend interview process.

In extend interview process they will assign a mentor for you. Your mentor will give some task from Java, Javascript etc..After one month they confirmed my offer.

Zoho Interview Experience | Set 27 (Off-Campus for Software Developer)

Round 1: Written test
The first round comprised of 25 one mark questions (without options) from C output questions and puzzle & general aptitude questions (Test Duration: 2 hour)
C output questions part covered questions from iterations, pointers, array and data structures.
Tips :- Solve the technical apt questions first and don't stress yourself. Try to solve general apt after solving technical questions. (If you are strong in technical, it is easy to clear this written test)
Reference :

http://markandayannotes.blogspot.in/2015/12/c-questions_24.html
https://kowsalyasumathi.blogspot.in/2016/06/c-program-quiz-question.html
https://www.geeksforgeeks.org/quiz-corner-gq/#C%20Programming%20Mock%20Tests

Round 2: Coding round
You will be provided laptop and turbo C compiler. Java , C++ also allowed for second round.
*********STRICTLY NO INBUILT FUNCTIONS**********
Some of the questions are.

1. Find the extra element and its index
Input : [10, 20, 30, 12, 5]
     [10, 5, 30, 20]
Output : 12 is the extra element in array 1 at index 4

Input : [-1, 0, 3, 2]
     [3, 4, 0, -1, 2]
Output : 4 is the extra element in array 3 at index 5
2. Find the least prime number that can be added with first array element that makes them divisible by second array elements at respective index (check for prime numbers under 1000, if exist return -1 as answer) & (Consider 1 as prime number)

Input : [20, 7]
     [11, 5]
Output : [1, 3]

Explanation :
(20 + ?) % 11
(7 + ?) % 5

3. Sort the array elements in descending order according to their frequency of occurrence

Input : [2 2 3 4 5 12 2 3 3 3 12]
Output : 3 3 3 3 2 2 2 12 12 4 5
Explanation : 3 occurred 4 times, 2 occurred 3 times, 12 occurred 2 times, 4 occurred 1 time, 5 occurred 1 time

Input : [0 -1 2 1 0]
Output : 0 0 -1 1 2
Note : sort single occurrence elements in ascending order

4. Print true if second string is a substring of first string, else print false.

Note : * symbol can replace n number of characters
Input : Spoon Sp*n Output : TRUE
   Zoho   *o*o Output : TRUE
   Man   n*   Output : FALSE
   Subline line Output : TRUE

Round 3: Advance programming round
Lift system
There were 8 modules
1. Display the position of Lift

Lift : L1 L2 L3 L4 L5
Floor: 0 0 0 0 0

2. Assign Lift to the users

Input : 2 5
Output : L1 is assigned
Lift : L1 L2 L3 L4 L5
Floor: 5 0 0 0 0

3. Assign nearest lift by comparing their current positions
Assume,

Lift : L1 L2 L3 L4 L5
Floor: 5 2 7 9 0
Input : 4 10
Output :
L1 is assigned

Lift : L1 L2 L3 L4 L5
Floor: 10 2 7 9 0
Explanation : L1 is near to 4 floor

4. If two lifts are nearest to the user's source floor, the assign the lift with same direction of user's requirement.
Example: if user request to move from 4 to 2 ,and if L3 is in 5th floor & L5 is in 3rd floor, then we should assign L3 because user requested for downward motion so L3 ill move down from 5th floor

5. Restrict L1 & L2 for 0-5th floor , L3 & L4 for 6-10th floor , L5 for 0-10th
Initially all lifts are at 0th floor.

6. Assign lift with least number of stops
Example:
If L3 is in 9th floor
And L5 is at 8nd floor
If user wants to move from 8 to 0
We should assign L3 because L3 ill stop at 8,7,6 and then 0 NumberOfStops = 3, but L5 ill stop at 8,7,6,5,4,3,2,1,0 and NumberOfStops = 8 so we should assign L3

7. Assign capacity (Number of people capable to travel) to all lift and assign according to the capacity

8. If any lift is under maintenance then their current position should be marked as "-1" and that lift should not be assigned at any cost.

Round 4 and 5: Interview (technical and HR)
In technical interview some puzzles and programming questions were asked. In HR interview some basic HR questions were asked.
Zoho Interview Experience | Set 28 (Off Campus Drive

The whole process took 5 Rounds and 2 days.

Round 1: The first round was the pen paper based round. It had 15 Technical questions and 10 Aptitude Questions.

In technical question they asked questions on code output generally from C and a bit from Java too.

Question were based on different topics like Loops, Pointer/Double pointer, Arrays etc. Aptitude is not as easy as some mass recruiters you will have to dig in a bit to get the answers. My Aptitude went really bad but Technical went really awesome. And was luckily shortlisted for the next round. Out of some 1000 people some 100-200 people were selected for the next round.

Round 2:
So this is the phase where actual hands on coding begins. I was given one string based question pretty easy for someone who is good with competitive programming. Few were again filtered out in this round

Round 3:
Now this is the one of he most challenging round in Zoho process. They asked to programme three questions, and all three were of really good standard. At first look I thought Ok, this is where my journey to zoho end's. But somehow after thinking about the questions and writing numerous cases and algos over and over again. I got output for all three questions. This round went for about 3-4 hours. Many people again got filtered in this stage again.

Round 4:
Now this is the final coding round where everyone was given one big coding question which they had to implement using OOPS concepts(Just the basics). People were given ample amount of time to complete this coding round. I got and Employee management system. It was distributed in 5 different stages in which you have to implement each stage one after the another. A peron from zoho will be monitoring you from the beginning till end, he also asked me to implement 6-7 extra functionalities in the system apart from the ones that were mentioned in my question.d

Round 5:
So this was the Technical interview It generally revolved around my resume. So whatever you write on your resume some questions will be designed on that and also

Zoho Interview Experience | Set 29 (Off-Campus for Software Developer)

Round 1:

First round was technical aptitude with 40 questions – 20 programs and 20 flow charts (Time : 2hrs).

I was shortlisted for the second round and got a mail.

Round 2:

Second round was programming round . It was an offline programming round for the entire day. We get the next program only if we finish one. They had their own test cases. We can code the programs in C, C++ or Java.

They had programs related to :

prime number – print n prime numbers
prime factor – sort the array based on the minimum factor they have.
adding a digit to all the digits of a number eg digit=4, number = 2875, o/p= 612119
form the largest possible number using the array of numbers.
lexicographic sorting.
given a set of numbers, and a digit in each iteration, if the digit exists in any of the numbers, remove its occurrences and ask for the next digit till the list becomes empty.
Check if a number 'a' is present in another number 'b.
I forgot the other 4.

Complexity is not an issue.

As soon as I finished 11 programs, they told me to come the next day for third round.

Round 3:

It was again a whole day of coding . This time all the questions were based on matrix. I got 6 programs, again you get the next program after you complete the current program. All the

programs were just an addition to the previous one. Here the concepts to be strong about were logic for diagonals (all the four, top-left, top-right, bottom-left, bottom-right), finding the path in a matrix from source to destination.

Make sure that the design of your code is good so that iterative additions become easy.

After this on the

Round 4:

The HR team was really good. They make you feel comfortable.

The HR asked me some puzzles related stuff and one algorithmic question. He wanted to see how i could optimize the complexity.

Then i was told to wait and again was called for the next Technical HR immediately.

Round 5:

Here i was told to print a pattern, puzzles, and some questions about myself were asked .

Then i was called again by another Technical HR.

Round 6:

Here i was asked about data structures . I was told to implement a binary search tree in C.

After this I was told that if i am selected, I will get a call for the HR round .

I got call the next day and was called at the office for HR.

Round 7:

The HR was very cool and he wanted me to be comfortable . He asked me questions from the resume and i was told that i would receive a mail if i get selected.

Zoho Interview Experience | Set 30 (Off-Campus for Software developer)

Round 1:
Pen and paper round having 40 technical questions including flowcharts and output prediction for C Programs with no choices. No negative marking and I've attended only around 30 questions.

Round 2:

I was called for round 2 after some days. It's a full day coding round. I was given a paper having the problem,test cases and i need to implement them in c. Questions were given one after another after i implement each problem. After solving each problem they tried all possible test cases. For me all the questions were from linked list counting around 14 at the end of the day.some of them are,

Finding middle element, Sorted insert, reversing LL, merging 2 LLs in sorted, removing duplicate elements and so on.

All of the above should be optimized in terms of time complexity because they will also check the logic behind our code.

Round 3:

I was asked to come to next round on the end of round 2 itself. Yet another full day of coding. In this round i need to implement a game in C, that's well known as 'Tetris blocks'. It involves full of matrix operations. I completed nearly around 75% of the game. After this I was asked to implement the Binary Search tree-insert,search,delete.

Technical interviews:

While implementing the 3rd round game, i was called for 2 technical interviews. I was asked to write algorithms and also some technical questions,puzzles were asked. some of them are,

Separate 0s and 1s in single array traversal
Finding the largest palindromic sub word in a given word

Finding height of a binary tree
Java oops concepts including abstract classes,interfaces,inheritance
tree/graph traversals
How arrays are working at system level in c
Puzzles on probability, number digits

HR round:
After one week, i was called to their office for the general HR round. I received my offer after one week and now I am doing my internship at Zoho.

Zoho Interview Experience | Set 31 (Off Campus)

Nothing hard as such was asked in ZOHO off campus recruitment held in January. Most of the question are from pointers and arrays types. For this c output questions have to be prepared well from geeks section itself. For the second part that is the aptitude part mostly the questions were from puzzles that are their is geeks puzzles section, problems on ages, probability, time and word.

Study hard the questions are such that if you are familiar with all the concepts of arrays, string and pointers then any one can crack the first round.

Zoho Interview Experience | Set 32 (On-Campus)

Round 1:

Zoho CRM team visited for on-campus.There were questions based on c apps (15), general apps (10).Test for about 1 and half hrs.

Round 2:

Those who have shortlisted from first round have second round coding in PC.not online coding.

1. Print longest sequence between same character

Ex I/p abcccccbba

O/p 8 (from a to a)

I/p aaaaaaaa

O/p 6

2.sort the array odd numbers in ascending and even numbers in descending.

I/p 5 8 11 6 2 1 7

O/p 1 5 7 11 8 6 2

3. It's about anagram.i/p was array of strings .and a word was given to find whether it has anagram in given array.

I/p catch, got, tiger, mat, eat, Pat, tap, tea

Word: ate

O/p eat, tea

4.array of numbers were given to find a number which has same sum of numbers in it's either side.

I/p 1, 2, 3, 7, 6

O/p 7(has 1+ 2+3 in left 6 in right)

Round 3:

Those who have solved 4 or above problems has shortlisted for 3rd round.It was a gaming round.

Size of the array is given were w is wall, g ground, o ball, numbers are bricks.

I/p size 7

Number of bricks 6

Position (2, 2)(2, 3)(2, 4)(3, 2)(3, 3)(3, 4)

Ball:5(life)

w w w w w w w

w   w

w   1 1 1   w

w   1 1 1   w

w   w

```
w               w

w g g  o g g w
```

There are three commands St, lt, rt straight, left, right respectively.

If it is st the ball moves straight .if there any brick(1) along the way it hit it .then brick disappear.ball back to original position.if there is no brick .it come to initial position.

I/p st

O/p

```
w w w w w w w

w               w

w    1 1 1   w

w    1    1   w

w               w

w               w

w g g  o g g w
```

Ball count:5

I/p lt

O/p

```
w w w w w w w

w               w

w    1 1 1   w

w         1   w

w               w

w               w
```

```
w g o g  g g w
```

Ball count:4

(Lt : ball moves diagonally left there is no bricK on the way so it hit the wall reflect back horizontally there is a brick(3, 2) after hitting it it moves downwards ball position changed.hence ball count get reduced. On moving downwards is there any brick that also disappear.)

Same for rt but moves diagonally right.

This is first module.In second module each brick has value for each hit value get reduced.it disappear only when it become zero.

There are about 7 modules.

Those who have clear at least first module.selected for fourth round.

Round 4:

Technical HR

Only logic was asked for some programming question. And some puzzles question.

Round 5:

General HR

who have cleared 4th round are almost in.

Zoho Interview Experience | Set 33 (Off-Campus for Software developer)

Round 1:

C apps 10 one mark questions and 5 two mark questions

General apps 10 one mark questions . (puzzles from gfg and other aptitude questions)

Round 2:

1.Given two dimensional matrix of integer and print the rectangle can be formed using given indices and also find the sum of the elements in the rectangle
Input: mat[M][N] = {{1, 2, 3, 4, 6}, {5, 3, 8, 1, 2}, {4, 6, 7, 5, 5}, {2, 4, 8, 9, 4} };
index = (2, 0) and (3, 4)
Output:
Rectangle
4 6 7 5 5
2 4 8 9 4
sum 54

2. Find the result subtraction, multiplication, division of two integers using + operator.
Input: 6 and 4
output:
addition 6+4 = 10,   subtraction 6+(-4) = 2, multiplication = 24,   division = 1

Input : -8 and -4
Output:
addition -8+(-4) = -12,   subtraction (-8)+(-(-4)) = -4,   multiplication = 32,   division = 2

3.Given a sentence of string, in that remove the palindrome words and print the remaining.
Input:
He did a good deed
Output:
He good

Input:
Hari speaks malayalam
Output:
Hari speaks

4.Given two dates, find total number of days between them.

Input: dt1 = {10, 2, 2014} dt2 = {10, 3, 2015}
Output: 393

dt1 represents "10-Feb-2014" and dt2 represents "10-Mar-2015" The difference is 365 + 28

Input: dt1 = {10, 2, 2000} dt2 = {10, 3, 2000}
Output: 29

Note that 2000 is a leap year

Input: dt1 = {10, 2, 2000} dt2 = {10, 2, 2000}
Output: 0

Both dates are same

Input: dt1 = {1, 2, 2000}; dt2 = {1, 2, 2004};
Output: 1461

Number of days is 365*4 + 1
5.

Let 1 represent 'A', 2 represents 'B', etc. Given a digit sequence, count the number of possible decodings of the given digit sequence.

Examples:

Input: digits[] = "121"
Output: 3 // The possible decodings are "ABA", "AU", "LA"

Input: digits[] = "1234" Output: 3

// The possible decodings are "ABCD", "LCD", "AWD"

6. https://www.geeksforgeeks.org/convert-sentence-equivalent-mobile-numeric-keypad-sequence/

Round 3:

Given an employee date base.

Name, Age, Designation, Department Of ten people.

and Five tasks were given such as

1. Print all employee details.

2. Searching employee details

3. Employees under the given manger name of the department

4. reporting to tree of the given employee name

Zoho Interview Experience | Set 34 (Off Campus)

Hi!! I Recently attended Zoho off campus. I'st round in Madurai and remaining rounds in Chennai campus.

Round 1: C AND APTITUDE [2 HRS]

TECHNICAL : 20 C Output questions. Questions pointers, Matrix, Arrays, strings. Practice all C output questions set in geeksforgeeks which is more than enough.
https://www.geeksforgeeks.org/tag/c-output

APTITUDE : 15 Puzzles. Practice Logical reasoning questions.

Got mail after 2 weeks for second round.

Round 2: SIMPLE CODING [3 HRS]

Coding in system. Allowed to use c/c++/java. They expected the optimized solution for all the questions. Needs to discuss the approach before start solving each question.

Given two Strings s1 and s2, remove all the characters from s1 which is present in s2.
Input: s1="expErIence", s2="En"
output: s1="exprIece"
Find the next greater element for each element in given array.
input: array[]={6, 3, 9, 10, 8, 2, 1, 15, 7};
output: {7, 5, 10, 15, 9, 3, 2, _, 8}
If we are solving this question using sorting, we need to use any O(nlogn) sorting algorithm.
Print all distinct permutations of a given string with duplicate characters.
https://www.geeksforgeeks.org/distinct-permutations-string-set-2
Given a number, find the next smallest palindrome.

https://www.geeksforgeeks.org/given-a-number-find-next-smallest-palindrome-larger-than-this-number
Given an array with repeated numbers, Find the top three repeated numbers.
input: array[]={3, 4, 2, 3, 16, 3, 15, 16, 15, 15, 16, 2, 3}
output: 3, 16, 15
People who completed 4 and above are selected for next round on same day. Try to optimize your solution as much as possible. They will ask you to optimize till you come up with an expected time complexity solution.

Round 3: Advanced Programming round [3 HRS]

This round is mainly based on data structure and oops concepts.
No inbuilt collections are allowed. You need to implement on your own.

Needs to discuss your approach before start solving the problem.

Design a system with following functionalities,

SET a variable
GET a variable
UNSET a variable
COUNT NUMBERS OF VARIABLE with given value
BEGIN — Begins a new transaction
ROLLBACK — Roll back all the commands in the open transaction
COMMIT — Commit the transaction
EXAMPLE 1:

SET a 20
GET a 20
SET b 30
GET b 30
SET a 10
GET a 10
UPDATE c 40 No variable named "c"
SET c 30
COUNT 30 2
COUNT 40 null
UNSET a
GET a null

EXAMPLE 2:

GET a null
SET a 30
GET a 30

EXAMPLE 3:

SET a 30
BEGIN
GET a 30
SET a 40
GET a 40
SET b 40
GET b 40
ROLLBACK
GET b null
GET a 30

EXAMPLE 4:

BEGIN
SET a 40
SET b 40
SET c 50
COUNT 40 2
BEGIN
COUNT 40 null
COMMIT
COUNT 40 2
BEGIN
SET c 10
GET c 10
ROLLBACK
GET c 50

filter_none
edit
play_arrow

brightness_4
#My solution in Pyhton .
dic = {}
dic1 = {}
while(1):
    try:
        query = [str(i) for i in raw_input().split(" ")]
        # print query
        # try:

```python
        if query[0] == "set":
            dic[query[1]] = query[2]
        elif query[0] == "unset":
            dic[query[1]] = "null"
        elif query[0] == "update":
            dic[query[1]] = query[2]
        elif query[0] == "get":
            print dic[query[1]]
        elif query[0] == "count":
            count = 0
            for i in dic:
                if dic[i] == query[1]:
                    count = count + 1
            print count
        elif query[0] == "begin":
            while(query[0]!= "rollback"):
                query = [str(i) for i in raw_input().split(" ")]
                if query[0] == "set":
                    dic1[query[1]] = query[2]
                elif query[0] == "unset":
                    dic1[query[1]] = "null"
                elif query[0] == "update":
                    dic1[query[1]] = query[2]
                elif query[0] == "get":
                    print dic1[query[1]]
                elif query[0] == "count":
                    count = 0
                    for i in dic:
                        if dic[i] == query[1]:
                            count = count + 1
                    print count
    except KeyError:
        print query[1]," is not present"
        pass
```

I used stack to solve the above modules.

4 of us completed all the modules and called for technical round on next day.

Round 4: TECH 1 [around 30 minutes]

Discussion about current project. Most of the questions are about tech skills you mentioned in the resume.

Be clear with things you added in your resume. If they find you are good enough they will send you to HR else this is the end of the line.

3 of us called for hr round.

Round 5: HR ROUND [10 mins]

Why you are leaving your current job in short span ? [1 yr experience]
Why Zoho?
Where will you stay? [they expect you to stay within 10-15 km from office as it is mentioned in interview call letter itself]
Discussion about package.

After 4 days, got call from hr saying "You make it into the team" . All 3 are selected in HR round.

Zoho Interview Experience | Set 35 (On-Campus)

Round 1: The first round consists of 15 c aptitude questions and 10 aptitude questions. Out of 15 c-aptitude questions, 10 were allocated 1 marks and 5 were allocated 2 marks. The questions will be mostly based on backtracking with recursions and functions. Theory type questions won't be asked. Also, concentrate on pointers. Note: All the questions are fill in the blanks.

Round 2: The second round consisted of 5 questions. Time: 2h30m

1. Print the given input string in 'X' format.

Note: The string length will be of odd length.

https://www.geeksforgeeks.org/print-string-of-odd-length-in-x-format/

2. Two sorted arrays will be given. Create an array consisting of the elements of two arrays with duplicate elements removed in sorted order.

Note: Use only one loop. No sorting.

https://www.geeksforgeeks.org/union-and-intersection-of-two-sorted-arrays-2/

3. Two strings of equal length will be given. Print all the adjacent pairs which are not equal.

Input: asdfghij and adsfgijh

Output: sd-ds, hij-ijh

4. Find the frequency of all numbers in an array.

Note: use dynamic memory allocation.

For example, if the input is {1, 2, 45, 67, 1, 88}, do not calculate the frequency of all elements from 1 to 88.

5. From the input sentence given, find the strings which are not palindrome and print it.

Input: he knows malayalam

Output: he knows

Round 3:

One application will be given. Time: 2h30m

Write an application for booking railway ticket reservation system. The application should have four functionalities.

Book
Cancel
Print booked tickets (details with summary)
Print available tickets (details with summary)
Conditions for booking:

There are a total of 63 berths for 63 confirmed tickets, 9 berths for 18 RAC tickets and 10 tickets in waiting-list. If the waiting-list ticket count goes above 10, print as 'No tickets available'. The following passenger details should be obtained from the user.

Name
Age
Gender
Berth Preference
The tickets should not be allocated for children below age 5.But, their details should be stored.
Lower berth should be allocated for persons whose age is above 60 and ladies with children if available.
Side-lower berths should be allocated for RAC passengers.

Conditions for cancelling:

Whenever a ticket is cancelled, a ticket from RAC should be confirmed and a waiting-list ticket should move to RAC.

Conditions for printing booked tickets:

Print all the tickets that are filled along with the passenger details and at the end, print the total number of tickets that are filled.

Conditions for printing available tickets:

Print all the tickets that are unoccupied and at the end, print the total number of tickets that are unoccupied.

Zoho Interview Experience | Set 36 (Software Developer)

Round 1:There were 10 C programming questions and 15 Aptitude questions.

Round 2:

1. Given a text and a wildcard pattern, implement wildcard pattern matching algorithm that finds if wildcard pattern is matched with text. The matching should cover the entire text (not partial text).

The wildcard pattern can include the characters '?' and '*'
'?' – matches any single character
'*' – Matches any sequence of characters (including the empty sequence)

Example:
Text = "baaabab",
Pattern = "*****ba*****ab",
output : true
Pattern = "baaa?ab", output : true
Pattern = "ba*a?", output : true
Pattern = "a*ab", output : false

2. Given an input string and a dictionary of words, find out if the input string can be segmented into a space-separated sequence of dictionary words. See following examples for more details.

Consider the following dictionary
{ i, like, sam, sung, samsung, mobile, ice, cream, icecream, man, go, mango}

Input: ilike
Output: Yes
The string can be segmented as "i like".

Input: ilikesamsung
Output: Yes
The string can be segmented as "i like samsung" or "i like sam sung".<>

3.Print the following pattern

```
  1
  3 2
 6 5 4
10 9 8 7
10 9 8 7
 6 5 4
  3 2
  1
```

4.Given an array as input, The condition is if the number is repeated you must add the number and put the next index value to 0. If the number is 0 print it at the last.

Eg: arr[] = { 0, 2, 2, 2, 0, 6, 6, 0, 8}
Output: 4 2 12 8 0 0 0 0 0 .

Zoho Interview Experience | Set 37 (Java Developer)

Round 1: There were 20 Aptitude Questions and 10 Java MCQ.No C or C++ questions.

Round 2: This time it was quite easy ..

1.Given a String with or without special characters find if it is Palindrome or Not.. No splitting of array must be done or No additional spaces must be used for storing the array..

Eg: RACE CAR

Eg: I DID, DID I ?

2. Given an array of integers of size n. Convert the array in such a way that if next valid number is same as current number, double its value and replace the next number with 0. After the modification, rearrange the array such that all 0's are shifted to the end.

Input : arr[] = {2, 2, 0, 4, 0, 8}
Output : 4 4 8 0 0 0

Input : arr[] = {0, 2, 2, 2, 0, 6, 6, 0, 0, 8}
Output : 4 2 12 8 0 0 0 0 0 0

3 . TWISTED PRIME NUMBER

A number is said to be twisted prime if it is a prime number and reverse of the number is also a prime number.

Input : 97
Output : Twisted Prime Number
Explanation: 97 is a prime number and its reverse 79 is also a prime number.

4.
Given an array A[] and a number x, check for pair in A[] with sum as x.

Eg : Input {1, 2, 4, 3, 5, 6}
SUM : 5
Output : 2 (1, 4) & (2, 3)

5.Largest Sum Contiguous Subarray
(Kadane' Algorithm)

6.Diamond pattern : for given input size -> Here 3
```
  *
 ***
*****
 ***
  *
```
Zoho Interview Experience | Set 38 (On-Campus)

Around 1400 students appeared for 1st round. Two teams came to our campus.If one team rejected a candidate they were made to sit for the next team for the same round.

Round 1:

10 very simple C question(find the output) and 20 Aptitude was asked in first round. It was much similar service based company questions.C questions very basic like string reverse, add all digits, etc. Aptitude was similar to service based company level(puzzles, distance & speed, probability, average, combinations).

Students who solved all C questions and Aptitude were taken to round2.

Round 2:

Problem 1:

Many students will able to solve 3 problems in this round. So make sure you stand apart from the crowd.Their vacancy is going to be 5 for a team. The performance in this round could be taken as a tie breaker for round 3.

input : aaabbcc

output : abc

Problem 2:

Evaluate the expression and sort and print the output. Getting the input is the tricky part

Input:

Number of input : 4

2*3

2^2^2

35

3*1

Output:

3*1

2*3

2^2^2

35

Problem 3:

Given a 6 blocks, of different height h1, …, h6 . Make 2 towers using 3 Blocks for each tower in desired height h1, h2. Print the blocks to be used in ascending order

Input:

1 2 5 4 3 6

height of tower: 6 15

Output :

1 2 3 & 4 5 6

Problem 4:

Given a 5X5 chess board as input. 9 knights are placed in the board. Print whether the configuration valid or Invalid.

Problem 5:

Given a number, print all the code that can be formed with z={a=1, .., z=26}.

1123

{1, 1, 2, 3} = aabc

{11, 2, 3} = kbc

{1, 1, 23} = aaw

{11, 23} = kw

Round 3:
Many students will be able to solve this round. So try to perform best in round 2.

You will be asked to explain before starting.Try to figure out the boundary testcases .They asked us to implement a gift card system with a existing bank.

The bank has many customers . Each customer can create many gift card. Balance should detected from bank balance when a gift card is created.A gift card has a id, pin.You can Top-up any gift card, close gift card and buy item using gift card(they are called transactions), etc.

Write clean code and use object oriented language.

Boundary case are :

Customer does not exist
Money is negative
Round 4(Technical Hr):

They ask questions from dbms, os, etc and some puzzles.

Zoho Interview Experience | Set 39 (On-Campus Drive for Software Developer)

The recruitment process took place for two days in our campus in June '17.

Round 1:
This was an online MCQ's test .There were 20 questions in each of the two sections, one for C Programming (Loops, functions, Strings, etc…) and the other for Quantitative Aptitude(really tough). It was an online test this time, unlike the usual written test. Top 50 students were selected for next round.

Round 2: Short Coding
1. Pangram Checking
Check whether all english alphabets are present in the given sentence or not
I/P: abc defGhi JklmnOP QRStuv wxyz
O/P: True

I/P: abc defGhi JklmnOP QRStuv
O/P: False

2. Password Strength
Find the strength of the given password string based on the conditions
Four rules were given based on the type and no. of characters in the string.
Weak – only Rule 1 is satisfied or Rule 1 is not satisfied
Medium – Two rules are satisfied
Good – Three rules satisfied
Strong – All Four rules satisfied

I/P: Qw!1   O/P: Weak
I/P: Qwertyuiop   O/P: Medium
I/P: QwertY123   O/P: Good
I/P: Qwerty@123   O/P: Strong

3. First Occurences
Given two strings, find the first occurence of all characters of second string in the first string and print the characters between the least and the highest index

I/P: ZOHOCORPORATION PORT
O/P: OHOCORPORAT

Explanation: The index of P in first string is 7, O is 1, R is 6 and T is 11. The largest range is 1 – 11.
So print the characters of the first string in this inex range i.e. OHOCORPORAT

4. Matrix Diagonal sum
Given a matrix print the largest of the sums of the two triangles split by diagonal from top right to bottom left
I/P:

3 3
1 2 3
4 5 6
7 8 9

O/P: 38

5. Matrix Addition
Given n integer arrays of different size, find the addititon of numbers represented by the arrays

I/P: 4
3 5 4 2
2 4 5
4 5 6 7 8
4 9 2 1
1 2
O/P: 50856

6. Cricket Scores
Given a timeline of scores, find the individual scores of player 1 and player 2 and Extras
W – Wide N – No Ball . – Dot Ball
Consider the game starts from player 1
I/P:

1 . 2 . 4 3 6 W 1 . N . 2 1
O/P:

P1 – 8
P2 – 12
Extras – 2

7. Queries
R A B C
1 56 67 89
2 89 54 90
3 78 91 83
4 69 72 95
R – Rollno, A, B, C – Marks in three subjects
Given the above matrix, print the result of the queries given the following syntax.
The first input string has a single character denoting the field to be printed.
* – All fields of the selected rows
A – Print only field A
B – Print only field B
C – Print only field C

The second string contains the condition – <field><relational_operator><value>.
> – Greater than
< – Less than
= – Equal to

I/P: *
A>70

O/P:

2 89 54 90
3 78 91 83
4 69 72 95

I/P: A
C<90

O/P:

56
78

8. Count Possible Paths
Given a N*N binary matrix and the co-ordinate points of start and destination, find the number of possible path between them.
I/P:
4
1 0 0 1
1 0 1 0
1 1 1 0
0 1 1 1

1 2 (start position)
0 0 (destination)
O/P: 2

I/P:
4
1 0 0 1
1 0 1 0
1 1 1 0
0 1 1 1

2 0 (start position)
3 3 (destination)
O/P: 2

9. Shuffle an Array
Given a range of numbers print the numbers such that they are shuffled
First line contains no. of test cases.
I/P:
3
1 10
5 12
1 10

O/P: (The order of numbers may vary)
2 3 9 5 1 10 6 7 8 4
5 6 9 12 10 11 7 8
9 5 1 2 3 4 8 7 6 10

If any of the given ranges are same, The orders of the numbers must vary.
I/P: 4
1 7
1 7
1 7
1 7
O/P:
6 7 1 5 2 3 4
1 7 2 6 3 5 4
6 3 5 1 4 2 7
1 2 3 6 5 7 4

Around thirty students were selected for next round.

Round 3:Advanced Coding

This time we were asked to develop the good old BOMBERMAN game. There were six modules, each of which is an improvement of the previous module. We were evaluated at the completion on each module. The each module were given with very clear explanation and sample test cases. The HR's were friendly and cleared the doubts of the students. Around twenty were selected for the next round.

Round 4: Technical HR

Questions were from Java, OOPs, Basics of DBMS, Projects, etc… A data structure problem was given for which I have to give the logic to solve it followed by some puzzles. Some real time applications and the problems in it were discussed.

Round 5: General HR

You are almost IN if you are called for this round. Some common HR questions and you are done with the interview.

The overall interview process was really good and anyone with really good Problem Solving and Logical Thinking skills can crack it.

Zoho Interview Experience | Set 40 (On-Campus)

Round 1: 15 find the output coding questions and 10 aptitude. Time = 2 hours.

Round 2:There were 5 coding questions which we need to solve in 3 hours and anyone who solves 3 questions were taken for 2nd round

1) https://www.geeksforgeeks.org/wildcard-pattern-matching/

2) https://www.geeksforgeeks.org/number-cells-queen-can-move-obstacles-chessborad/

3) https://www.geeksforgeeks.org/job-sequencing-problem-set-1-greedy-algorithm/

4) https://www.geeksforgeeks.org/word-ladder-length-of-shortest-chain-to-reach-a-target-word/

5) There are 'n' ants on a 'n+1' length rod. The ants are numbered from 1 to n and are initially placed at positions starting from position 1 till position n. They are moving either in left direction (denoted by '-1') or in the right direction (denoted by '1'). Whenever an ant crosses the boundary of the rod it falls off the rod. You are given the initial direction of the ants. Now, whenever two ants collide their direction switches, i.e. the ant going in left direction ('-1) changes it's direction towards right ('1') and the ant going in the right direction ('1') changes it's direction towards left ('-1'). Find last ant to fall off the rod.

Note: In case two ants are falling simultaneously in the end print the index of the lower indexed ant.

Input:
2
2
1 1
8
1 1 -1 1 1 1 -1 1

Output:
1

3

Round 3: we were told to develop an application on a given environment(Chess tournament). we were given 3 hours to write the code. They mainly focused on data structures used, how neatly we were writing the code and how well we are able to fix the bugs in it.

Round 4: It was a technical interview round where I was mainly asked about the projects I had listed in my resume. After that he asked questions on database-indexing, JSON and XML parsing, Searching techniques, Page replacement algorithms and map-reduce concepts.

Round 5: Last round was HR. I was asked basic questions like why zoho, if I wanted to do higher studies etc

Zoho Interview Experience – On campus | Set 41

Zoho was a two day process. The first day had the aptitude and coding round.

The second day consisted of the module coding and interview rounds.

Round 1: Aptitude

The first round consists of 15 technical MCQ's and 10 aptitude questions. This is a pen and paper round.
There are NO choices for the questions. You have to write the answers.

Mark weightage:

Technical:

Q.No 1-10 – 1 mark each

Q.No 11-15 – 2 marks each

Aptitude – Q.No 1 -10 – 1 mark each

Total Questions: 25

Total Marks: 30

The technical questions consisted of :

Pointers
Arrays using Pointers(matrices and multidimensional arrays included)
Operator Precedence and Associativity
String Manipulation
Loops (basic iteration questions)
Operators(++, −, arithmetic, assignment, logical, relational, conditional, bitwise)
Recursion
All the above topics are very important. Also solve questions based on pointers and operator precedence. Refer the below links.

https://www.geeksforgeeks.org/difference-between-p-p-and-p/

https://www.geeksforgeeks.org/difference-const-char-p-char-const-p-const-char-const-p/

Sample questions asked was about permutations, for loop manipulation(eg: for(i=0; i=i-1;i=1)).

The general aptitude questions consisted of:

Logical reasoning
Pattern completion
Car in the box puzzle
Pipes and Cisterns
Probability
Complete the number series
Count number of shapes
Tips :

Solve the first round calmly because it is the round where many students are easily filtered out.
Concentrate on technical aptitude as it has more weightage.
The round is about 1 hour.
Round 2: Coding

The second round was a coding round. Zoho did not use any technical platform such as Hackerrank or Hackerearth for coding. So there were no automated testcases.

We could code in any language of our choice. The paper consisted of 5 questions.

Sort the given elements in decending order based on the number of factors of each element – Solution 1
Find whether the given number is palindrome or not. Don't use arrays or strings – Solution 2
Reverse the given string keeping the position of special characters intact – Solution 3
Find the shortest path from one element to another element in a matrix using right and down moves alone. The attached solution uses moves in all directions. – Solution 4
Pattern
Round 3:

The third round consisted of module coding. As told before, this was the first round on the second day.

The module given to me was Flight Reservation system. There were several modules where we had to implementation functionalities. Some are mentioned below:

Get input from two flights – 101 and 102 with different passengers for each flight.
After booking seats, display the seat number to the passenger.
The meal has an additional charge which has to be included
Surge pricing was that every ticket (business/ economy) was incremented by a specific price after each successful booking.
A flight summary has to be displayed.
Cancellation of flights should be done. The refund should be calculated properly.
I used structures and file manipulation for completing the module round.

Round 4: Technical interview

I had two technical interviews.

The first interview had the following questions:

Tell me about yourself where you have to speak as much as possible.

Project questions.
C questions about static variables.
The possible moves a knight can make in a chessboard.
Puzzles. Use Geeksforgeeks for puzzle reference. Solve how many ever you can.
Artifical intelligence usage in college campus.
What is NoSQL and how are the documents stored?
OOPS concepts
How does a DNS server work?
FTP and HTTP usage.
SQL Queries
The second interview consisted of the following questions:

Tell me about yourself
What is minified css?(bootstrap.min.css)
DOM when a webpage loads
Java questions- Singleton class
Garbage collection in Java
CSS insertion types
Bootstrap questions
Linked list and other data structures questions
The questions were based on my area of interest.
Mine was Web Development and Data structures.

Java knowledge is very important for attending Zoho. I learnt some basics of Java alone.

Round 5: General interview

This was a general interview where they tested the candidate based on situation questions. Normal questions were asked such as what salary package do you want to be put in and why. Would you work or go for masters? What do you like about Zoho?

Zoho Interview Experience | Set 42(Off-Campus)

I attended Zoho interview on Feb 2nd, 2019

Round 1:

There were 25 questions.15 Technical Questions and 10 Aptitude questions

Technical Questions-Basic looping, conditional statements, operators, increment and decrement operators, pointers

General Aptitude-problems on train, pipes and cistern, ratio and proportion, puzzles, clocks, calendar, speed and distance, basic logic questions

Tips: Geeks puzzles, c set questions -64, For Aptitude prepare specific topics, refer India bix

Give more importance to technical than general aptitude questions

Round 2:

I got mail for second round on Feb 27th, 2019.The second round was scheduled on March 5th, 2019

Three questions were given

https://www.geeksforgeeks.org/find-number-currency-notes-sum-upto-given-amount/
https://www.geeksforgeeks.org/number-cells-queen-can-move-obstacles-chessborad/
https://www.geeksforgeeks.org/program-to-convert-hexadecimal-number-to-binary/
https://www.geeksforgeeks.org/convert-binary-number-hexadecimal-number/
From around 25, 10 were shortlisted to the next round

Round 3:

The bank has initially three customers.There were around eight modules .

Account Login
Purchase
Account Login

Giving customer id and password .Password should be encrypted and stored

Encryption is like A-> B, B->C

a-> b, b->c, c->d

0->1, 1->2

On successful login, it should print the account details

  1.Create Gift Card

  2. TopUp

  3.Transaction History

  4.Block

  5.Logout

1.Create Gift Card

Gift card with 5 digit card no and 4 digit pin number will be genrated

2.TopUp

For topup, amount need to be reduced from main account balance and added to gift card

3.Transaction History

Should print all the transaction details of a particular gift card

4.Block

If the card is blocked, shouldn't be available for topUp, Purchase.the amount in gift card should be transferred to main account

5.Logging Out

After log out, should go to main module,

2.Purchase

Login to the gift card

Purchase Amount

Then print Available balance

7.Redeem points :

For Every 100 rupee purchase, 1 reward point is added .For 10 reward points, 10 will be added to main account

8.Doing for Multiple gift cards

Around 5 to 6 of us who completed 6 to 7 modules were shortlisted to next round

Round 4:Tech HR(Face to Face)

1.Final Year Project

2.Collections ? Data Structures in Java

3.Difference Between HashSet, HashMap, List

4.Overriding and Overloading

5.Abstract class and interface

6.if throws keyword in base class, then is it necessary to do the same in derived class

7.Should we need to create abstract class object

8.Balanced Parenthesis problem

9.Difference between Stack And queue

10.Does HashSet accepts Object, then how it implements unique character

11. Upcasting and DownCasting in java

12.static and instance variable

13.Can static method accepts instance variables

14.Exception

15.Access specifiers

16. Digged mostly oops concept

You will be evaluated in each and every round in all aspects .