Consolidated Interview Questions

1. Filter array of event number double the element using and sum all the elements in the array using reduce.
2. Difference between Stateful and Stateless components in React.
3. What are props? State its uses.
4. Why do we use className instead of class in React?
5. If we do not use SetState, then what happens?
6. How do we declare a variable in React?
7. Explain Component Lifecycle.
8. What's the use of useState?
9. How many components do we have in React?
10. Find the duplicate element in the array
11. What is DS? Stack, what is react?
12. How is it different from other frontend frameworks/lib? Components, DOM, lifecycle methods
13. Why index shouldn't use in react key attributes
14. It not recommended to use index as key
15. What are data structures and types of data structures
16. React lifecycle method
17. React hooks
18. Controlled and uncontrolled components in react
19. What are data structures? Types, stacks queues,
20. Why is react used?
21. types of data structures in js,
22. Components and its types, properties and state,
23. Hooks, why use lists and few basic questions in js
24. Server side rendering and client side rendering
25. Basics of react, hooks, component data structures
26. Why is React best?
27. Type of components in react?
28. What is dom?
29. About redux
30. Context api vs redux
31. Routing in react vs html route
32. Demonstrate how the request/response APIs would work for this problem? Explain with a pseudo code
33. Javascript output based questions and polyfills.
34. Javascript concepts like event loop, event delegation and handling performance related questions.
35. find sum of array which contains function and promises. The array length is 10000, each function execution takes 200ms and promises to resolve 1 sec, optimise this problem to run in the browser such that the main UI thread is not blocked. Also, use divide and conquer.

36. QUESTION 1:
    a. Consider the following
    b. A = [1,2,3]
    c. B = A
    d. A = [4,5,6]
    e. What will be output if we print B?

37. QUESTION 2:
    a. Consider the following
    b. A = [1,2,3]
    c. B = A
    d. A[0] = [4]
    e. What will be output if we print B?

38. QUESTION 3:
    a. Consider a bookstore. A book can have only one author. An author can write multiple books. Design an efficient database schema for this problem.

39. QUESTION 5:
    a. Given a positive integer n, find the smallest integer which has exactly the same digits existing in the integer n and is greater in value than n. If no such positive integer exists, return -1.

40. QUESTION 6:
    a. You are given two identical eggs and you have access to a building with n floors labeled from 1 to n.
    b. You know that there exists a floor f where 0 <= f <= n such that any egg dropped at a floor higher than f will break, and any egg dropped at or below floor f will not break.
    c. In each move, you may take an unbroken egg and drop it from any floor x (where 1 <= x <= n). If the egg breaks, you can no longer use it. However, if the egg does not break, you may reuse it in future moves.
    d. Return the minimum number of moves that you need to determine with certainty what the value of f is.

41. First He asked me to develop an HTML form.
    a. Then he asked me design that with scratch using CSS
    b. Then he asked to do vertical and horizontal in Centre
    c. Then he asked to validate the input field and send the error msg to the span tag and display it

42. Coding : Make a working submission form that will take username and password and have a submit button.
    a. Code in both the files .html and .ts (controller also have to be defined)
43. Theory : All basics about angular and typescript, npm and other related topics.

44. Asked to make reactive form
45. Design simple HTML CSS form add validation to input fields
46. What is mapping
47. Difference between array mapping and array filter
48. Given the Nth number you have to find how many of the numbers are divisible by 13 and 5 both and then sum the number.
49. Find length of the string and number both
50. hooks
51. props
52. difference between class components and functional comments
53. destructure the first element from the array.
54. set-timeout related coding with fetching data
55. one parent component is there inside that i have to show two child components in Which one child i have to write a description but it will show in another child..
56. reverse string..
57. one code for react with ternary operator ...
58. useEffect
59. useLayout and difference between them
60. We have provided 2 APIs that give a list of stocks and their prices (See 'Input API Details' section below.)
    a. Create web application with the following 2 pages
    b. Stocks page
    c. Display a table listing the symbol, name and category for each instrument
    d. Provide a search box that fuzzy searches the symbol and name and filters the list of stocks shown in the table
    e. On clicking any symbol, user must be redirected to quotes page for that symbol (see below)
    f. For this page, load data from /instruments API (see 'Input API Details' section below)
    g. Quotes page
    h. For the selected instrument, show the list of quotes
    i. The quotes must be sort-able by timestamp ascending or descending
    j. Please refresh the quotes when the valid_till timestamp for the data expires
    k. For this page, load data from /quotes API (see 'Input API Details' section below)
    l. Please make the pages look nice

61. I've been given a linked list and I had to find out whether there is any loop in it or not
62. where I've to parse through an array, add the numbers in array, but we can add it only if the current number is multiple of previously added number
63. Difference between state and redux..

64. What are components in React
65. Props drilling…
66. And counter app program with redux
67. What is react and Why do we use react…
68. What is state in React
69. Use of add event listeners …
70. What is redux….
71. Redux flow and Why we have to use redux

1) What is react ?
2) Difference btwn class based and functional based components?
3) What are lifecycle methods?
4) Difference between == and ===?
5) Output of snippet code simple normal output of the code
6) Difference between == and ===
7) Javascript Hoisting
8) What is redux
9) What is the use of useeffect
10) How use useffect works
11) What is usecontext api
12) What is API how it's works
13) Told me to design product card using HTML,CSS,JS
14) React Timer App With Start, Pause, Reset Functionality
15) RemoveDuplicates
16) Convert Number into single digit Sum.
17) Designing of Card Component from one of their website
18) let vs const, set timeout, hoisting, closures etc
19) Basic js questions
20) Display first non repetitive char
21) Highest number of repeated chars in a word
22) Lengthy word in a string
23) 2 mcqs are
    a) Set timeout(var)
    b) For loop output
24) Largest string
    a) Input - abc12&bd3&+@))hjskf
    b) Output - hjskf
25) Word with largest common strings
    a) Input - hello world
    b) Output - hello
    c) Coz l is 1 duplicate
26) Total 4 questions 3 dsa question. 1 react native question. My react native question is to increment the count value. And 2 mcqs
27) Find the first non repeating character in the string. If there is no non repeating char then return "EMPTY".

```
function firstnonrepchar(str){
    for(let i=0;i<str.length;i++){
        let firstindex = str.indexOf(str[i]);
        let lastindex = str.lastIndexOf(str[i]);

        if(firstindex == lastindex) return str[i];
    }
    return "EMPTY";
}
console.log(firstnonrepchar("abcabc"));
```

1. Find the word which has maximum length after removing punctuation marks. For
    Example: "Hi!, this is Eve". Output should be this because Hi!, after removing
    punctuation marks is Hi and length is 2

```
function greatestword(str){
    let strarr = str.split(' ');

    let result="";
    let maxlen = 0;

    for(let x of strarr){
        let newstr = withoutpunctuation(x);
        if(maxlen < newstr.length){
            result = newstr;
            maxlen = newstr.length;
        }
    }

    return result;

}

function withoutpunctuation(str){
    let regex = /[!"#$%&'()*+,-./:;<=>?@[\]^_`{|}~]/g;

    return str.replace(regex, ");
}
```

1. It was a car question in which car had strawberry juice as petrol and juice stations. The
    cars had to complete circle without running out of fuel data structure were 2
    dimensional arrays
2. gives an array of numbers. we get one number. with that number we add or remove on
    each element. for getting the minimum difference. suppose array [2,8] the number is 2.

We add 2 as the 0th element and remove 2 as the 1st element. so getting array 4 and 6 min difference of first element last element is 2

3. Program questions are
    a. Display data that stored in object
    b. give example to props
    c. example for clousers
4. Theory questions
    a. in how many ways we can use css in react
    b. class comp vs function vomp
    c. use of position: absolute and relative
    d. Hoisting
    e. css she asked about position

RD 2:

1. It was majorly on concepts of css javascript react
    a. Fetch
    b. Promises
    c. Async await
    d. Express ja
    e. All were in depth conceptual

2. Theory questions on js and react:
    a. What is pros and cons of react
    b. What is jsx
    c. What is use of ref in react
    d. What is hoisting
    e. What are data types in js
    f. What is redux store
    g. What are props and state
    h. Virtual and real dom etc

3. She gave me a website and told to print exact similar component
4. Tell me about your projects
5. Local storage vs cookies vs session
6. High order Components
7. Hook
8. types of Hooks
9. Hoisting
10. find the frequency of the numbers present in array
11. lifecycle methods in react for functional components
12. find frequency of all numbers in an array coded in javascript
13. hoisting in javascript
14. showed a website and asked to code html css to print the same without table tags.
15. Told me to build a class component
16. Single page Application

17. Callback function code
18. States
19. arrow functions
20. Props
21. Events
22. event bubbling
23. how to stop event bubbling
24. difference between event and props
25. round table coin puzzle
26. Difference between html version 4 and 5
27. Different types of block level elements and inline element
28. Explain the difference between visibility hidden and display none
29. What is a box model?
30. What is sup tag?
31. Difference between let and var?
32. What is closure?
33. What is Hoisting with an example.
34. What is Scope in Javascript?
35. Find the output of the given program.(most of the program are based on setTimeout())
36. Code: Reverse of the string
    a.   example: input: [My city is cool]
    b.   output: [yM ytic si looc]
37. Code: Function that will check if the given input is Integer or not.
38. Different life cycle of the component.
39. What are react hooks and their types?
40. How to execute componentDidMount() in a functional component?
41. How does useEffect() work?
42. What is redux?

--- 20 logical aptitude
--- 20 data structures+sql+programing output questions
--- 2 program coding from code force.. i didnt solved due to time finished

Coding questions are from codeforce…

Bob has a garden in which he has three rows of flowers.These three rows follow a unique
pattern such that the difference between the number of flowers of any two successive rows is
the same in magnitude as well as in sign. Yesterday, Alice (Bob's ultimate crush) visited his
garden and she was very happy to see the flowers. She told Bob that she wants a garden
having exactly N flowers.

Bob doesn't want to remove the three rows of flowers he already has. He also loves the
pattern they form and will, at all costs, preserve this pattern.

Bob wants you to calculate the minimum number of rows of flowers he needs to add to have exactly N flowers in his garden while preserving the pattern made by the initial three rows.

Input
You are given integers a1, a2 & a3 which denote the number of flowers in the first three rows as well as N which denotes the total number of flowers required.

Output
If it is possible to get exactly N flowers then print the number of rows he should add, otherwise print "Get another crush:(" (Without Quotes).

CONSTRAINTS

$1<=a1,a2,a3<10^6$
$1<=N<10^{10}$

Sample Input
14 17 20
275
Sample Output
7
Time Limit: 1
Memory Limit: 256

Technical round Coding questions:

1>To create a website with use state.. take input from input box and do operation with that in react

2>And make application to show useRef and usememo live working

3> prototype inheritance :

```
Var Employee ={
name:Akshay "
}
let emp1=Object.create(Employee)
delete emp1.name
Console.log(emp1.name)
4>
```

1. Async, await and promise function

2. Diff b/w State component and functional component.
3. These were also asked
4. What is css flex
5. He asked me div, span
6. He wanted two div elements to come in single line using css
7. Then project related questions
8. What is arrow function in Java script
9. What is the diff b/w arrow function and normal function
10. Why is arrow function healthier
11. What is destructing
12. He gave me a coding question and asked to destructure the array
13. This keyword
14. Extract perticular name from given object
15. HTML Syntax
16. Different types of linking CSS with HTML
17. Difference between Absolute and Relative
18. Detail about Flex property
19. Can we overlap one div with another div?
20. Using CSS want alert window to be display in Center
21. Different types of linking Javascript in HTML
22. Javascript Destructure, Array,
23. Difference b/w let,const,var
24. box model
25. How to do div elements centre
26. How to create project in HTML
27. Inline & block elements
28. extract array elements in JS
29. closure
30. Call back
31. React- virtual Dom, how to do routing

Q.1 You have to design a Pop up and to show it at the centre so what will be your approach to design it ?

Q.2 What are the initial methods to start a web project ?

Q.3 Make a copy of the array and replace it first item with another item without changing the original array ?

Q.4 Give an example of callback functions?

Q.5 What is Asynchronous in Javascript?

Q.6 Why is React so popular these days ?

Css- to do div element in centre (horizontally + vertically),

Html- how to create html project,

Js- copy one array..effect should be there by changing one of them, do array empty,let var and const,
React- useEfect only

```
1. Align the div element in center with width=100px and height =100px

2. Copy the array to another array and replace the first element with value 5
   example -    let arr = [1,2,3]
                let arr2 = [...arr]
                arr2[0] = 5;

                output - [5,2,3]

3. Create a object with propery name='abc'
   let obj = {name:'abc'}
   add property last name

   obj['lastname'] = 'xyz'

4. Delete the object property 'name';
   ans -    delete obj.name
```

1.Tell 5 html tag
2. Diff between var and let
3. Write two obj and merge in one
4. What is the input tag...
5. Difference between input and paragraphs tag

Basic html some coding of javascript
Basic css

1) The programming question is like, we need to complete a function whose logic goes like.
A,b,k are parameters

Res = a
For i inclusive 1,k
If i is odd, res = res & b and if i is even res = res | b
And return a

Catch here will be time complexity

2) 2 trains running opposite to each other with speeds 35m/s and 15m/s on a belt whose speed is 10m/s. If the trains are at 2500m/s distance apart. Calculate the time
3) Few questions are based on blood relations & they will give sample code snippet and ask us the expected output
4) Another logic question which i remembered is this pattern

```
   3.        2
5 28 8.   7 59 9
   2.        X
```

Find x
5) There is one code snippet where logic is written in such a way expecting the output to print 0,1,2,3,4,5 each at gap of 1 sec, but the output will be 5,5,5,5,5,5 because of the concept called closure

Round 3 Tech Round 1
1) He asked everything like from project to basic dsa like he asked what is JWT in our project And what is Pub Sub architecture. What is the time complexity of many algorithms and stuff. What is a linked list? What is BST? What is Unique about BST? Rest all basic questions related to personal checks, what do I do etc.
2) 1 coding question of fibonacci series & time complexity of code and normal basics questions about hobbies interest and future growth