**HTML**

1. What is Semantic Tag ?
2. What is inline and block level element?
3. What is id and class?
4. What is the use of loading attribute?
5. What is video and audio tag?
6. What is Html form? How to create form?
7. How to make input field mandatory and what is the use of name,value,placeholder attribute?

**CSS**

1.what are the types of css? Which css has high priority?

2. what is the difference between position relative and position absolute?

3. what is flex container and flex child property?

4. what is css box model?

5. Difference between Inline, Block and Inline Block?

6. What is Margin, Padding, Border and Border Radius?

7. what is relative and absolute units?

8. what is media query in CSS?

9. what is transition and animation in css?

**JS**

1. What is JavaScript? What is JRE and JS Engine?
2. What is Hoisting and Temporal Dead Zone?
3. What is closure and Lexical Scoping(Scope Chaining)?
4. What is arrow function? Diff between implicit and explicit return?
5. What is Functional Programming? Diff b/w HOF and CBF?
6. What is the difference between function declaration and function as expression?
7. What is an Array in JS? Explain map, reduce and filter?
8. What is Object in JS? Explain Shallow copy and Deep Copy?
9. What are constructor Function and what is the use of this keyword?
10. What is call, apply and bind in js?
11. What is Destructuring? Explain array and object destructuring?
12. What is rest and spread operator?
13. What is JSON?
14. What is DOM?
15. What are event listeners? What are form events?
16. What is debouncing?
17. What is bubbling and capturing?
18. What is Asynchronous JavaScript?
19. What is a module? Types of Modules?
20. What is Set time out and Clear time out?
21. What is set interval and Clear Interval?
22. What is call back hell in js?
23. What is promise in js?
24. What is fetch and how to use with async await?
25. What is exceptional handling and use of throw keyword?

**React:**

1. What is React? History of React
2. Difference between library and framework?
3. What is Real Dom and Virtual Dom?
4. What is HMR?
5. What is Reconciliation and Diffing algorithm?
6. What is JSX? Explain its rules?
7. What is components? Explain its types?
8. Difference between class based component and Functional based component?
9. What is state and what is props?
10. Difference between state and props?
11. How do you handle events in react?
12. What is controlled and uncontrolled component?
13. What is Props drilling?
14. What is Hooks in React?
15. What is React life cycle methods? Explain all
16. What is the use of useState hook?
17. What is the use of useEffect hook?
18. What is useRef hook why it is different from others?
19. What is ContextAPI?
20. What is custom hooks?
21. What is parent liftup state?
22. What is conditional rendering?shockcircuit ?
23. What is React router ?
24. What is Redux and Redux Toolkit?

**React Practical Questions**

1. How would you implement a dynamic form in React?
2. How do you handle authentication in a React application?
3. How would you handle API calls in a React component?
4. How do you manage global state in a React application?
5. How do you make search bar and to do list?
6. How would you implement a search feature in a React application?
7. How do you make counter effect?
8. How do you make conditional rendering light dark mode effect?

**Programming Questions:-**

1. Write a js program to create a function that calculates sum of 100 natural numbers?
2. Write a js program to create a function that calculates sum of square of 100 natural numbers?
3. Write a js program to create a function that calculates power?
4. Write a js program to create a function that calculates factorial?
5. Write a js program to create a function that takes a number anc chek whether it is prime number or not?
6. Write a js program to create a function that takes an array calculate sum?
7. Write a js program to create a function that takes and array and reverse them?
8. Write a js program to create a function that takes and array and find median value?
9. Write a js program to create a function that takes an array and check whether the array element is prime number or not?
10. Write a js program to create a function that takes and array and split them in two equal parts?
11. Write a js program to create a function that takes a value and check whether it is palindrom number or not?
12. Write a js program to create a function that takes a value and check whether it is perfect number or not?
13. Write a js program to create a function that takes a value and check whether it is Strong Number or not?
14. Write a js program to create a function that takes a value and check whether it is Armstrong Number or not?
15. Write a js program to create a function and find Strong Number between 1 to 100 ?
16. Write a js program to create a function and find Armstrong Number between 1 to 100 ?
17. Write a js program to create a function and find Perfect Number between 1 to 100 ?
18. Write a js program to create a function and find Prime Number between 1 to 100 ?
19. Write a js program to create a function that takes a value and count the number of digit?
20. Write a js program to print Fibonacci series?

**Important Question for Patterns**

1. Write a program to print square star pattern?

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1. Write a program to print right triangle star pattern?

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1. Write a program to print left triangle star pattern?

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1. Write a program to print star pyramid pattern?

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1. Write a program to print reverse star pyramid pattern?

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1. Write a program to print diamond star pyramid pattern?

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1. Write a program to print pascal traingle?

1

1 2 1

1 2 1 2 1

1 2 2 1 2 2 1

1. Write a program to print Fibonacci series pattern?

0

1 1

2 3 5

8 13 21 34

55 89 144 233 377

1. Write a program to print triangle?

1

2 3

4 5 6

7 8 9 10

11 12 13 14 15

10. write a program to print triangle?

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5