HR INTERVIEW QUESTIONS AND ANSWERS

Ques. How do you handle the criticism?

Ans. I approach criticism with a calm and open mind, treating it as an opportunity to learn and grow. I carefully analyze the feedback to determine whether it could impact my future work. If it does, I focus on improving in that area to ensure the issue doesn't recur. For example, while working on a **Tourism WebApp project**, one of my colleagues pointed out that the design wasn't fully responsive on certain screen sizes. I took this feedback positively and explored additional utilities in Tailwind CSS to handle responsive designs more effectively. By implementing these improvements, I not only enhanced the responsiveness of the project but also deepened my understanding of Tailwind CSS and improved my overall development skills.

Ques. What are your greatest strengths and weaknesses?

Ans. **Strengths:**
"One of my greatest strengths is my ability to manage time effectively and lead teams efficiently. I excel at prioritizing tasks based on their urgency and importance, ensuring that all responsibilities are completed within deadlines. Additionally, my team leadership skills allow me to delegate tasks appropriately and foster collaboration to achieve collective goals."
Weakness:
"On the other hand, I recognize that I have a weakness when it comes to public speaking or addressing large groups, as I tend to experience stage fear. However, I am actively working to overcome this by practicing in front of a mirror and taking opportunities to speak in front of my peers in class. I am confident that with continued effort, I will significantly improve in this area."

Ques. What is your biggest achievement so far?

Ans. One of my biggest achievements so far has been securing 92.2% in my Class 10th examinations, which earned me recognition in the local newspaper. This accomplishment was especially significant because it not only reflected my hard work but also set a record for the highest score in my school's history at that time. As a result, I was awarded a scholarship of ₹5,000 by the school—a gesture they had never offered before. It was a proud moment for me, as my batch made history and brought pride to the school. Achieving this milestone motivated me to continue striving for excellence in all areas of my life.

Ques. Where do you see yourself in 5years?

Ans. In 5 years, I see myself as a skilled professional who has significantly contributed to the success of this company. I aim to have developed a deeper understanding of [specific field or role] and grown both technically and personally. I also aspire to take on more responsibility, possibly in a leadership role, where I can mentor others and help drive impactful projects.

Ques. Why should we hire you? (for specific role dekhlena)

Ques. Tell me about yourself?

Ans. Good morning sir, My name is Aarya Rastogi. Currently, I am pursuing BE final year specialisation in Computer Science Engineering . I hailed from Moradabad, UP. I have completed my schooling from Moradabad, UP by securing 94.8%. I am a MERN stack developer having keen interest in web development . I know some webbed technologies like react js , html , css , tailwind css etc. I have also made some web development projects which are full stack also. I have done internships also as a full stack developer . One of my favourite project which is full stack is tourism website where a person can login to their account and manage booking cabs , flights and trains tickets etc. My hobbies are reading and travelling. Thats all about me Thank you.

OR

Good morning, sir/ma'am.
My name is Aarya Rastogi, and I am currently in my final year of BE, specializing in Computer Science Engineering. I am from Moradabad, Uttar Pradesh, where I also completed my schooling, achieving 94.8%.
I am a passionate MERN stack developer with a keen interest in web development and a strong command of technologies like React.js, HTML, CSS, and Tailwind CSS. During my academic journey, I have completed several full-stack web development projects. One of my favorite projects is a Tourism WebApp, where users can log in to manage bookings for cabs, flights, and train tickets, among other features. Second project is e-commerce web app where users can login into your account and can add any item to the cart and can purchase that by doing the payment.

In addition to my projects, I have gained valuable industry experience through internships as a full-stack developer, which have helped me refine my skills in creating user-friendly interfaces and optimizing backend operations.

Ques. What is your salary expectation?

Ans. As a fresher, my primary focus is on gaining valuable experience and contributing effectively to the organisation. I am open to a competitive salary that aligns with industry standards and the company's compensation structure for this role.

OR

I expect a salary aligned with current industry market standards.

Ques. Why u choose Btech in CSE rather than any other bachelors degree?

Ans. I chose B.Tech in Computer Science Engineering because of my deep interest in problem-solving, logical thinking, and technology. From an early stage, I was fascinated by how software applications work and how technology impacts our daily lives. This curiosity led me to explore programming, which I thoroughly enjoyed.

During my academic journey, I developed a strong foundation in data structures, algorithms, and full-stack development, particularly working with the MERN stack. I also worked on multiple projects, including an **Ecommerce WebApp and a Tourism WebApp**, where I applied my knowledge to build real-world solutions. My experience in internships further reinforced my passion for software development, as I got the opportunity to enhance websites, integrate APIs, and optimize backend operations.

Choosing CSE has been the right decision for me, as it has allowed me to continuously learn and apply my skills in challenging projects, coding competitions, and real-world applications. I'm excited to keep growing in this field and contribute to impactful solutions.

Ques. Do you think you are perfect ?
Ans. I don't consider myself perfect, but I'm dedicated, adaptable, and always eager to grow.

Ques. What you have done in the lockdown period?
Ans. During the lockdown, I have strengthened my DSA skills and start learning frontend development with React JS. This foundation helped me to understand how frontend interacts with the backend which eventually sparked my interest in backend development.

Ques. What you have done in your college 4 years?
Ans. Over the past 4 years of my college journey, I've built a strong foundation in computer science fundamentals and practical development. I focused on mastering data structures and algorithms, learned full-stack web development with the MERN stack, and worked on several real-world projects like an E-commerce WebApp and a Tourism portal. I also completed internships where I improved backend APIs, integrated frontend with databases, and collaborated in team-based environments. Overall, I used my college years to become industry-ready both technically and professionally.

Ques. Why do you want to do a job?
Ans. I want to do job to apply my skills in real-world scenarios and also want to grow myself both technically and personally. I am excited to collaborate with the experienced professionals and contribute to meaningful or impactful projects.

Ques. Are you comfortable in working a startup environment?
Ans. Yes, I'm comfortable. I actually like how startups give more learning opportunities, and you get to take real responsibility. I feel it really helps you grow faster, and I'm someone who enjoys that kind of environment.

Brainteaser Interview Questions

1. **The Rope Puzzle**
   You have a rope that takes exactly one hour to burn completely. However, the rope does not burn at a uniform rate. How can you measure exactly 30 minutes using this rope?

2. **The Coin Flip Puzzle**
   You are given 10 coins, with 5 heads facing up and 5 tails facing up. You are blindfolded and cannot feel which side is up. How can you split the coins into two piles with an equal number of heads facing up?

3. **The Two Eggs Problem**
   You are in a 100-floor building and have two identical eggs. You need to determine the highest floor from which an egg can be dropped without breaking. What is the optimal way to find this floor while minimizing the number of drops?

4. **The Three Light Bulbs Puzzle**
   You are in a room with three switches, each connected to a different light bulb in another room. You can only enter the other room once. How do you determine which switch controls which bulb?

5. **The Missing Dollar Riddle**
   Three friends go to a restaurant and order a meal costing ₹300. They each contribute ₹100. The waiter realizes there is a ₹50 discount and gives ₹50 to the cashier, who keeps ₹20 for herself and gives ₹10 back to each friend. Now, each friend has paid ₹90 (₹100 - ₹10), totaling ₹270, and the cashier has ₹20, making ₹290. Where is the missing ₹10?

6. **The Fox, Chicken, and Grain Puzzle**
   You have a fox, a chicken, and a bag of grain that you need to take across a river. You can

only take one at a time. If left alone together, the fox will eat the chicken, or the chicken will eat the grain. How do you get all three across safely?

7. **The Hourglass Puzzle**
   You have two hourglasses—one measures 7 minutes and the other 4 minutes. How can you measure exactly 9 minutes?

8. **The Camel Across the Desert Puzzle**
   A camel has 3,000 bananas and needs to transport them across a 1,000-mile desert. The camel can carry a maximum of 1,000 bananas at a time but eats 1 banana per mile traveled. What is the maximum number of bananas that can be transported to the other side?

Answers to the Above Brainteasers

1. **The Rope Puzzle**
   Light the rope from both ends. Since it burns at an inconsistent rate, it will take exactly 30 minutes to burn completely.

2. **The Coin Flip Puzzle**
   Take any 5 coins and flip them over. This guarantees both piles have the same number of heads.

3. **The Two Eggs Problem**
   Start dropping the first egg at increments of 10 floors (10, 20, 30…). Once it breaks, use the second egg to check each floor one by one in that range.

4. **The Three Light Bulbs Puzzle**
   Turn on one switch for a while, then turn it off and turn on another. The bulb that is warm but off corresponds to the first switch, the one that is on corresponds to the second, and the remaining bulb is linked to the third switch.

5. **The Missing Dollar Riddle**
   There is no missing ₹10. The total amount paid by the friends (₹270) includes the ₹20 kept by the cashier, making it ₹290, not ₹300. The framing of the question is misleading.

6. **The Fox, Chicken, and Grain Puzzle**
   Take the chicken first. Go back alone. Take the fox but bring the chicken back. Take the grain and return alone, then finally take the chicken again.

7. **The Hourglass Puzzle**
   Start both hourglasses together. When the 4-minute one runs out, flip it. When the 7-minute one runs out, flip it. When the 4-minute one runs out again, 8 minutes have passed, so flip it again to measure the last minute.

8. **The Camel Across the Desert Puzzle**
   The optimal strategy involves staging banana drops at intervals to minimize loss. The maximum that can be transported across is **533 bananas** using a strategic drop-and-return method.

More Brainteaser Questions

1. **The Two Jugs Problem**
    You have a 5-liter jug and a 3-liter jug. You need to measure exactly 4 liters of water, but you can only fill, empty, or pour water between the two jugs. How do you do it?

2. **The Chessboard and Dominoes Puzzle**
    A standard chessboard (8×8) has two opposite corners removed. You have 31 dominoes, each of which covers two squares. Can you cover the entire modified board with these dominoes?

3. **The Monty Hall Problem**
    You are on a game show where you must choose between three doors. Behind one is a car, and behind the other two are goats. After you pick a door, the host (who knows what's behind them) opens another door, revealing a goat. You now have the option to switch or stick to your original choice. What should you do?

4. **The Three Jars Puzzle**
    You have three jars: one labeled "Apples," one "Oranges," and one "Apples & Oranges." All the labels are wrong. You can pick one fruit from any jar. How can you correctly label all the jars with just one pick?

5. **The Two Rope Burning Puzzle (Different Variant)**
    You have two ropes, each taking exactly 60 minutes to burn, but they burn irregularly. How can you measure exactly 45 minutes?

6. **The Poisoned Wine Problem**
    You have 1,000 bottles of wine, but one is poisoned. You have 10 test subjects (who will die if they drink the poisoned one). How can you find the poisoned bottle in just one round of testing?

7. **The Frog Jump Puzzle**
    A frog sits at the bottom of a 30-meter well. Each day, it jumps 3 meters up but slips back 2 meters at night. How many days will it take to escape?

8. **The Three Hourglasses Puzzle**
    You have hourglasses measuring 7 minutes, 11 minutes, and 13 minutes. How can you use them to measure exactly 15 minutes?

9. **The Birthday Probability Puzzle**
    In a room of 23 people, what is the probability that at least two of them share the same birthday?

10. **The Two Train Problem**
    Two trains are 100 km apart and moving toward each other at 50 km/h each. A bird flies back and forth between them at 100 km/h. What is the total distance the bird will travel before the trains collide?

Answers to the Above Brainteasers

1. **The Two Jugs Problem**
    Fill the 3L jug, pour it into the 5L jug. Fill the 3L jug again and pour until the 5L jug is full, leaving exactly 1L in the 3L jug. Empty the 5L jug, pour the remaining 1L into it, and fill the 3L jug again. Now you have exactly 4L in the 5L jug.

2. **The Chessboard and Dominoes Puzzle**
   No, it's impossible. Each domino covers one black and one white square. Removing two opposite corners leaves an unequal number of black and white squares, making it impossible to cover completely.

3. **The Monty Hall Problem**
   You should always switch. The probability of winning by switching is **2/3**, while sticking with the original choice gives only a **1/3** chance.

4. **The Three Jars Puzzle**
   Pick a fruit from the "Apples & Oranges" jar (which is mislabeled). If you get an orange, that jar contains only oranges. Use logic to relabel the others accordingly.

5. **The Two Rope Burning Puzzle (45 Minutes)**
   Light one rope from both ends and the second rope from one end. When the first rope is fully burned (30 minutes), light the other end of the second rope, which will now take 15 more minutes to burn.

6. **The Poisoned Wine Problem**
   Use binary representation to divide the 1,000 bottles among the 10 testers. Each tester drinks from bottles corresponding to 1s in their binary position. The poisoned bottle's binary number will reveal itself after they die.

7. **The Frog Jump Puzzle**
   The frog gains **1 meter per day** (3 up, 2 down). On the **27th day**, it reaches 27 meters. On the **28th day**, it jumps straight to 30 meters and escapes. Answer: **28 days**.

8. **The Three Hourglasses Puzzle**
   Start all three hourglasses. When the **7-minute** one runs out, flip it. When the **11-minute** one runs out, flip it. When the **7-minute** runs out again (14 minutes total), flip the **7-minute** one once more for 1 more minute, making 15 minutes.

9. **The Birthday Probability Puzzle**
   The probability is surprisingly high—**over 50%**! (It's about 0.507, using the birthday paradox formula).

10. **The Two Train Problem**
    The trains take **1 hour** to collide (100 km at 50 km/h each). The bird flies for 1 hour at 100 km/h, so it covers **100 km**.

GD start:
Good morning friends, I am glad to start the group discussion. So, the topic given to us for the discussion _____. It is the topic of current relevance / controversy / sensitive / interesting. I believe that _____(topic ke bare me btao). Now, I invite you all to participate in the group discussion.

For disagreeing: u have put very good points but I want to refine your points with the_____

From how long have u been working with web development? , technologies ,

What is html , semantic tags , apart from providing info to the developer does it help in any other way ,(search engine optimisation) , difference between tag and elements.

CSS Interview Questions

Ques. Why Do We Use -webkit- and -moz- Prefixes in CSS?

CSS **vendor prefixes** like -webkit- (for WebKit-based browsers) and -moz- (for Mozilla Firefox) are used to enable experimental or non-standard CSS properties before they are fully adopted as web standards.
1. Browser-Specific Implementations
Different browsers implement new CSS features at different speeds. To allow developers to use these features before they become standard, browser vendors introduce prefixes.
For example:
css
-webkit-border-radius: 10px; /* For Chrome, Safari */
-moz-border-radius: 10px;   /* For Firefox */
border-radius: 10px;   /* Standard property */

Here, older versions of **Chrome/Safari** required -webkit-border-radius, while **Firefox** needed -moz-border-radius. Once standardized, only border-radius is necessary.
2. Ensuring Compatibility with Older Browsers
Some older browsers may not support the unprefixed version of a property but still recognize the prefixed version. Using vendor prefixes ensures that styles are applied correctly in those browsers.
3. Testing Experimental Features
Before a CSS property is finalized in the official specification, browser vendors often release it with prefixes to allow testing and feedback from developers.
For example:
css
CopyEdit
-webkit-transition: all 0.3s ease-in-out; /* Chrome, Safari (older versions) */
-moz-transition: all 0.3s ease-in-out;   /* Firefox (older versions) */
-o-transition: all 0.3s ease-in-out;   /* Opera */
transition: all 0.3s ease-in-out;   /* Standard */

This ensures that transitions work across all major browsers, including older versions.

Ques. Do We Still Need Vendor Prefixes Today?

Modern browsers have largely standardized CSS features, reducing the need for vendor prefixes. However, for cutting-edge or experimental properties (like backdrop-filter or scroll-snap), prefixes may still be required.
To avoid manually handling prefixes, developers can use **PostCSS Autoprefixer**, which automatically adds necessary prefixes based on browser support data:
bash
npm install autoprefixer

Ques. How to ensure cross browser compatibility and how can we handle it ?

Ensuring Cross-Browser Compatibility and Handling Issues: Ensuring cross-browser compatibility involves designing and developing web applications to function consistently across different browsers and devices. This can be achieved through:

1. Adhering to Web Standards
   • Use semantic HTML, CSS resets/normalizers, and follow W3C standards.
   • Implement **progressive enhancement** to ensure core functionality works everywhere.
2. Feature Detection Over Browser Detection
   • Use **Modernizr** for detecting browser capabilities instead of relying on unreliable user-agent strings.

- Implement **polyfills** and **fallbacks** for unsupported features.
3. Responsive and Adaptive Design
   - Utilize **CSS media queries**, **flexbox**, and **grid** for adaptive layouts.
   - Ensure a seamless experience across different screen sizes and resolutions.
4. JavaScript Compatibility
   - Use **transpilers like Babel** to convert modern JavaScript (ES6+) for older browsers.
   - Avoid browser-specific JavaScript APIs and prefer standardized approaches.
5. Cross-Browser Testing
   - Test on major browsers (Chrome, Firefox, Edge, Safari) and mobile devices.
   - Use tools like BrowserStack, LambdaTest, or built-in developer tools for debugging.
6. CSS Compatibility
   - Use **vendor prefixes** (-webkit-, -moz-) where necessary or automate with **PostCSS Autoprefixer**.
   - Avoid experimental properties unless widely supported.
7. Automated Testing & CI/CD Integration
   - Perform **unit and integration testing** with Jest, Cypress, or Selenium.
   - Automate browser testing in **CI/CD pipelines** to catch issues before deployment.

Handling Cross-Browser Issues
1. **Identify** – Use developer tools to inspect and debug issues.
2. **Check Support** – Use **caniuse.com** to verify browser compatibility.
3. **Apply Fixes** – Implement fallbacks, polyfills, or alternative styling solutions.
4. **Document & Maintain** – Keep track of known issues and revisit them with browser updates.