



Full-Stack Web Development

III CSE/AI-ML NBKRIST VIDYANAGAR.....

Problem Statement 1: Arrow Functions for dummies

Problem Statement: Live Number Transformer

Design and develop a simple web page where users can enter a number into an input field. As they type, the system should instantly calculate and display two derived values: the square of the number and the cube of the number. This real-time interaction will visually demonstrate how easily JavaScript can respond to user input and perform calculations using concise arrow functions for immediate feedback.

Technical Specifications

- **HTML:**
 - A single input field where the user types a number.
 - Two distinct display areas: one for the calculated "Square" value and another for the "Cube" value.
- **CSS:** Apply simple, clean styling to make the interface easy to understand and use.
- **JavaScript:**
 - Utilize an arrow function as the event handler for the input field. This arrow function will trigger every time the user types.
 - Inside this arrow function, retrieve the current number from the input, perform the squaring and cubing calculations, and update the respective display elements.
 - The focus is on demonstrating the clarity and directness of arrow functions for handling real-time events, without needing complex array methods.

Problem Statement 1: Arrow Functions for dummies

Live Character Counter

Design and develop a simple web page with a text area. As the user types into the text area, a counter should update in real-time to display the current number of characters entered. This



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system will demonstrate instant feedback to user input, mimicking a real-time web interaction.

Technical Specifications

- **HTML:** Provide a text area for input and a dedicated element to display the character count.
- **CSS:** Apply basic styling for a clean and readable interface.
- **JavaScript:**
 - Use an arrow function as the event listener callback for the text area's input event.
 - The function should calculate the length of the text area's content and update the display.
 - No complex array methods like map or filter are required; focus on the basic syntax and use case of arrow functions for event handling.