

Javascript Fundamentals

Assignment Questions



- Q1. Write a JavaScript function called `outerFunction` that takes a parameter and returns an inner function. The inner function should access both the parameter of `outerFunction` and a variable declared within `outerFunction`. Demonstrate how lexical scoping allows the inner function to maintain access to these variables even after `outerFunction` has finished executing.**
- Q2. Create a JavaScript program that demonstrates the basic usage of regular expressions. Write a function that takes a regex pattern and a string as input and returns `true` if there is a match, and `false` otherwise. Test the function with various patterns and strings.**
- Q3. Write a JavaScript program that demonstrates the use of character classes in regular expressions. Create a function that searches for specific character classes in a given string and returns the matches. Test the function with patterns for digits, uppercase letters, lowercase letters, and special characters.**
- Q4. Create a JavaScript program that takes a regex pattern and a string as input. Write a function that not only checks if there is a match but also extracts specific parts of the matched text using groups. Test the function with patterns that include groups to capture different parts of a date (e.g., day, month, and year) from a given string.**
- Q5. You are building a shipping application. Write a program that takes the type of package ("standard", "express", or "overnight") and uses a switch statement to calculate and print the estimated delivery time based on the package type. For example, "standard" might take 3–5 days, "express" 1–2 days, and "overnight" would be delivered the next day.**