**CPAN 113 FUNDAMENTALS OF JAVASCRIPT  
LAB 1** : **VARIABLES AND DATA TYPES**

# OBJECTIVES

1. Understand how to declare and initialize variables using var, let, and const.
2. Practice working with different data types in JavaScript.
3. Use basic arithmetic and comparison operators.

# INSTRUCTIONS

Complete the following tasks. Each task should be written and tested in a JavaScript file (e.g., lab1.js).

## TASK 1 DECLARING VARIABLES

1. Declare a variable **userName** using **var** and assign your name to it.
2. Declare a variable **userAge** using **let** and assign your age to it.
3. Declare a constant variable **userID** using **const** and assign a fictional ID to it.

## TASK 2 UPDATING VARIABLES

1. Update the **userName** variable to a different name.
2. Update the **userAge** variable to a different age.
3. Attempt to update the **userID** variable and observe the result.

## TASK 3 WORKING WITH DIFFERENT DATA TYPES

1. Declare variables of different data types:

* A number: **let score = 95.5;**
* A string: **let courseName = "JavaScript Basics";**
* A boolean: **let isEnrolled = true;**
* An array: **let grades = [90, 95, 88, 92];**
* An object: **let student = {name: "Your Name", age: Your Age, course: "CPAN"};**

## TASK 4 ARITHMETIC OPERATIONS

1. Perform and log the result of the following operations:

* Add **userAge** and **score**
* Subtract **userAge** from **score**
* Multiply **userAge** by 2
* Divide **score** by **userAge**

## TASK 5 COMPARISON OPERATIONS

1. Compare **userAge** with a different age using **==** and **===**
2. Compare **score** with a different score using **<** and **>=**
3. Check if **isEnrolled** is true.

## TASK 6 CONDITIONAL STATEMENTS

1. Write an **if-else** statement to check if **userAge** is greater than 18.
2. Write a **switch** statement to log different messages based on **courseName**

# SUBMISSION

1. Ensure your code is saved in a file named lab1.js.
2. Test your code by running it in a JavaScript environment (e.g., browser console or Node.js).
3. Submit your lab1.js file via the course submission portal.
4. Attach a screenshot of the output along with the original code file.