**JavaScript Assignment: String Manipulation and Methods in Javascript**

### **Assignment Tasks**

#### **1. String Concatenation**

Write a **Javascript** program to perform the following:

1. Concatenate the strings "Hello" and "World" using the + operator and display the result.
2. Use string interpolation (backticks) to concatenate "JavaScript" and "is awesome" into one sentence and display it.

#### **2. String Length and Characters**

Write a program to perform the following operations on the string "Programming":

1. Display the length of the string.
2. Use the charAt() method to display the character at the 5th position.

#### **3. Searching in Strings**

Write a program to demonstrate the use of indexOf() and includes() with the string "Learning JavaScript is fun":

1. Find and display the index of the word "JavaScript".
2. Check if the string contains the word "fun" and display the result.

#### **4. String Slicing and Substring**

Write a program to extract parts of the string "Node.js is a runtime environment" using:

1. The slice() method to extract the word "runtime".
2. The substring() method to extract the word "Node.js".

#### **5. String Modification**

Write a program to perform the following on the string " JavaScript is versatile ":

1. Use the trim() method to remove extra spaces from both ends.
2. Replace the word "versatile" with "powerful" using the replace() method.
3. Display the final modified string.