

## JAVASCRIPT TEST SET 001

### Question 1 (Loops and Dynamic Printing - 30 Marks)

Write a JavaScript program to dynamically generate a multiplication table for numbers from 1 to 5. The program should use nested loops to print the table in the following format:

1 x 1 = 1

1 x 2 = 2

5 x 5 = 25

#### Instructions:

- Use `for` loops to create the table.
- Ensure proper formatting of the output, as shown above.
- The program should work dynamically for any range (e.g., 1 to 5).

### Question 2 (Functions and Logic - 35 Marks)

Create a function `checkPalindrome` that takes a string as input and returns `true` if the string is a palindrome and `false` otherwise. Ignore case and spaces while checking.

#### Instructions:

1. The function should:
  - Remove spaces and convert the string to lowercase.
  - Check if the string reads the same forward and backward.

```
console.log(checkPalindrome("Racecar")); // true
```

```
console.log(checkPalindrome("Hello")); // false
```

### Question 3 (Data Structure - 35 Marks)

Write a program that uses a stack to reverse a string. The program should use the following operations on the stack:

1. Push characters of the string into the stack.
2. Pop characters from the stack to create the reversed string.

#### Instructions:

- Implement the stack as an array.
- Use `push` and `pop` methods for stack operations.