Java Script Task-2

1) Implement a JavaScript function that checks if a given string is a palindrome (reads the same backward as forward).

CODE:

```javascript
function isPalindrome(str) {
    let reversed = "";
    for (let i = str.length - 1; i >= 0; i--) {
      reversed += str[i];
    }
    return str === reversed;
  }
  console.log(isPalindrome("madam"));
console.log(isPalindrome("hello"));
console.log(isPalindrome("radar"));
```

OUTPUT:true
        False
        True

2) Write a function in JavaScript that generates an array of Fibonacci

CODE:

```javascript
 function generateFibonacciArray(numTerms) {
    let fibonacciArray = [];

    if (numTerms === 1) {
      fibonacciArray.push(0);
```

```javascript
    } else if (numTerms >= 2) {
      fibonacciArray.push(0, 1);

      for (let i = 2; i < numTerms; i++) {
        let nextFibonacciNum = fibonacciArray[i - 1] +
fibonacciArray[i - 2];
        fibonacciArray.push(nextFibonacciNum);
      }
    }

    return fibonacciArray;
  }

  // Generate Fibonacci array with 10 terms
  console.log(generateFibonacciArray(10));
```

OUTPUT:

```
[
  0, 1,  1,  2,  3,
  5, 8, 13, 21, 34
]
```

3) Create a simple JavaScript program that uses setTimeout to display a message after a delay of 3 seconds.

CODE:

```javascript
console.log("Starting...");
setTimeout(function() {
  console.log("Message displayed after 3 seconds.");
}, 3000);
console.log("This will be displayed immediately.");
```

OUTPUT:

```
Starting...
This will be displayed immediately.
Message displayed after 3 seconds.
```