***Javascript Assignment 1***

1. *Write a program to find whether a given year is a leap year or not.*

*function findLeapYear(year) {*

*if (year % 4 === 0 && (year % 100 !== 0 || year % 400 === 0)) {*

*return true;*

*} else {*

*return false;*

*}*

*}*

***// Example usage:***

*console.log(findLeapYear(2000)); // true*

*console.log(findLeapYear(2020)); // true*

*console.log(findLeapYear(2021)); // false*

*console.log(findLeapYear(2100)); // false*

1. *Write a JavaScript program to convert temperatures to and from Celsius, Fahrenheit.*

*function celsiusToFahrenheit(celsius) {*

*var fahrenheit = (celsius \* 9/5) + 32;*

*return fahrenheit;*

*}*

*function fahrenheitToCelsius(fahrenheit) {*

*var celsius = (fahrenheit - 32) \* 5/9;*

*return celsius;*

*}*

***// Example usage:***

*console.log(celsiusToFahrenheit(0)); // 32*

*console.log(celsiusToFahrenheit(25)); // 77*

*console.log(fahrenheitToCelsius(32)); // 0*

*console.log(fahrenheitToCelsius(77)); // 25*

1. *Write a program to find the factorial of a number.*

*function factorial(num) {*

*if (num === 0 || num === 1) {*

*return 1;*

*} else {*

*return num \* factorial(num - 1);*

*}*

*}*

***// Example usage:***

*console.log(factorial(5)); // 120*

*console.log(factorial(7)); // 5040*

*console.log(factorial(0)); // 1*