ASSIGNMENT 1

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

function checkleapyear(year){

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

console.log(year + 'is a leap year');

}

else{

console.log(year + 'is not a leap year');

}

}

let year = prompt(‘enter a year:’);

checkleapyear(year);

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

[ Formula : c/5 = (f-32)/9 [ where c = temperature in Celsius and f = temperature in Fahrenheit ]

function cToF(celsius)

{

let cTemp = celsius;

let cToFah = cTemp \* 9 / 5 + 32;

let temp = cTemp+'\xB0C is ' + cToFah + ' \xB0F.';

console.log(temp);

}

function fToC(fahrenheit)

{

let fTemp = fahrenheit;

let fToCel = (fTemp - 32) \* 5 / 9;

let temp = fTemp+'\xB0F is ' + fToCel + '\xB0C.';

console.log(temp);

}

cToF(60);

fToC(45);

3. Write a program to find the factorial of a number.

let number = parseInt(prompt('Enter a positive integer: '));

if (number < 0) {

console.log('Factorial does not exist.');

}

else if (number === 0) {

console.log(`The factorial of ${number} is 1.`);

}

else {

let fact = 1;

for (let i = 1; i <= number; i++) {

fact = fact \* i;

}

console.log(`The factorial of ${number} is ${fact}.`);

}