**REACT**-**ASSIGNMENT I**

1)Write a java script function called countVowel that returns the number of vowels in a given String

Solution:

function countVowel(str) {

var count = 0;

str=str.toLowerCase();

for(var i=0;i<str.length;i++){

if(str.charAt(i)=="a"||str.charAt(i)=="e"||str.charAt(i)=="i"||

str.charAt(i)=="o"||str.charAt(i)=="u"){

count++;

}

}

return count;

}

console.log(countVowel("Hello"))

console.log(countVowel("Umbrella"))

Output:

2

3

2)Write a java script program called letterCount and uses loop to count letters in a String

Solution:

function letterCount(str, c) {

var count=0;

str=str.toLowerCase(); //Case insensitive

for(var i=0;i<str.length;i++){

if(str.charAt(i)==c){

count++; //Increment count

}

}

return count;

}

console.log(letterCount("Connect",'c'))

console.log(letterCount("first person",'s'))

Output:

2

2

3)Write a java script module that perform basic mathematical operations

Solution:

mathOperations.js

function add(a, b) {

return a + b;

}

function subtract(a, b) {

return a - b;

}

function multiply(a, b) {

return a \* b;

}

function divide(a, b) {

if (b !== 0) {

return a / b;

} else {

return "Cannot divide by zero";

}

}

// Exporting functions to make them accessible from other files

module.exports = {

add,

subtract,

multiply,

divide,

};

main.js

const math = require('./mathOperations');

const resultAdd = math.add(5, 3);

const resultSubtract = math.subtract(8, 4);

const resultMultiply = math.multiply(2, 6);

const resultDivide = math.divide(10, 2);

console.log(`Addition: ${resultAdd}`);

console.log(`Subtraction: ${resultSubtract}`);

console.log(`Multiplication: ${resultMultiply}`);

console.log(`Division: ${resultDivide}`);

Output:

Addition: 8

Subtraction: 4

Multiplication: 12

Division: 5

4)An example of DOM

Solution:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Simple DOM Example</title>

</head>

<body>

<h1>DOM Manipulation Example</h1>

<p id="demoParagraph">This is a simple paragraph.</p>

<button id="changeContentButton">Change Content</button>

<script src="script.js"></script>

</body>

</html>

script.js

function changeContent() {

const demoParagraph = document.getElementById('demoParagraph');

demoParagraph.textContent = 'Content changed! Clicked the button.';

}

document.getElementById('changeContentButton').addEventListener('click', changeContent);

Output:

The output of this HTML document, when viewed in a web browser.