ASSINGNMENT -1:

1. Write a javascript function called RectangleArea takes and returns the calculate the area?

Soln:

function calculateRectangleArea(length, width) {

const area = length \* width;

return area;}

const rectangleLength = 5;

const rectangleWidth = 8;

const areaOfRectangle = calculateRectangleArea(rectangleLength, rectangleWidth);

console.log("The area of the rectangle is:", areaOfRectangle);

Output:

The area of the rectangle is:40

2. Write a javascript function called printTriangle and uses a loop to print the pattern?

Soln:

function printTriangle(height) {

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

let row = '';

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

row += '\* '; }

console.log(row);

}}

Example: printTriangle(3)

Output:

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3. Write a javascript modules to create a greeting for specific name?

Soln:

greetModule.js:

export function greet(name) {

return "Hello, " + name + "!";}

main.js:

import { greet } from './greetModule.js';

Example:

const personName = "John";

const greeting = greet(personName);

console.log(greeting);

Output:

Greeting John.

4. Write a javaScript function that checks the age under 30 and filter the peoples?

Soln:

const people = [

{ id: 1, name: 'Alice', age: 25 },

{ id: 2, name: 'Bob', age: 30 },

{ id: 3, name: 'Charlie', age: 22 },

{ id: 4, name: 'David', age: 35 },

];

const under30 = (person) => person.age < 30;

const transformPerson = (person) => ({

id: person.id,

name: person.name.toUpperCase(),

age: person.age \* 2,

});

const youngPeople = people.filter(under30);

const transformedPeople = people.map(transformPerson);

console.log('People under 30:', youngPeople);

console.log('Transformed people:', transformedPeople);

Output:

People under 30: { id: 1, name: 'Alice', age: 25 }, { id: 3, name: 'Charlie', age: 22 }

Transformed people:

{ id: 1, name: 'ALICE', age: 50 },

{ id: 2, name: 'BOB', age: 60 },

{ id: 3, name: 'CHARLIE', age: 44 },

{ id: 4, name: 'DAVID', age: 70 }.