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// "use strict";

**/\* QUESTION 6 \*/**

const countObject = (function(){

var counter = 0;

function add() {

counter += 1;

}

function reset() {

counter = 0;

}

return {

add: add,

reset: reset,

counter: function() {

return counter;

}

}

})();

countObject.add();

console.log("count " + countObject.counter());

countObject.reset();

console.log("count " + countObject.counter());

**/\* QUESTION 7 \*/**

/\*

counter is the free variable.

A free variable is one referred to by a function which is not one of its parameters or local variables.

\*/

**/\* QUESTION 8 \*/**

const make\_adder = function (val) {

let counter = 0;

return function () {

counter += val;

console.log(counter)

}

};

const add5 = make\_adder(5);

add5(); add5(); add5();

const add7 = make\_adder(7);

add7(); add7(); add7();

**/\* QUESTION 9 \*/**

/\*

Using the module pattern (IIFE) can remove names from the global namespace.

They help to avoid declaring global variables/functions.

\*/

**/\* QUESTION 10**

\*/

const employee = (function () {

let name = "";

let age = 0;

let salary = 0;

// using function expression

const getName = function () {

return name;

};

const getAge = function () {

return age;

};

const getSalary = function () {

return salary;

};

const setName = function (newName) {

name = newName;

};

const setAge = function (newAge) {

age = newAge;

};

const setSalary = function (newSalary) {

salary = newSalary;

}

const increaseSalary = function (percentage) {

newSalary = getSalary() + (getSalary() \* percentage\*100);

setSalary(newSalary);

}

const incrementAge = function () {

newAge =getAge + 1;

setAge(newAge);

}

return {

setName: setName,

setAge: setAge,

setSalary: setSalary,

increaseSalary: increaseSalary,

incrementAge: incrementAge,

getInfo: function() {

return Name: ${name}, Age: ${name}, Salary: ${salary}

}

}

})();

employee.setName('Ian');

employee.setAge(20);

employee.setSalary(10000);

console.log('employee info: ' + employee.getInfo());

employee.increaseSalary(80);

console.log('employee info: ' + employee.getInfo());

**/\* Question 11 \*/**

employee.address = "";

employee.getAddress = function () {

return employee.address;

};

employee.setAddress = function (newAddress) {

employee.address = newAddress;

};

employee.setAddress("fairfield");

console.log(" Address: " + employee.getAddress());