WEB322 Test 1 Name: Nishit Gaurang Shah

# Instructions: Complete all questions in the spaces provided. This quiz is worth 10% of your final mark and you will have exactly 30 minutes to complete it.

# Question 1 (5 Marks):

Write a module called "counter" that exposes the following **3 functions** and has a variable named **privateCounter** which is a non-negative integer and initialized with 1. (**NOTE**: You may assume that you're writing your module inside a separate file "counter.js")

The module’s three functions:

## multiply(num)

This function multiplies the value of "num" with the variable **privateCounter** and save the result in **privateCounter.**

## divide(num)

This function divides the variable **privateCounter** with the value of "num" and save result in **privateCounter**. If the result of division is less then 1, the **privateCounter s**hould be set to 1.

## value()

This function will return the value of **privateCounter.**

## Usage Example (assuming "counter" references your module):

counter. multiply (15);

counter. divide (2);

console.log(counter. value ());

counter. multiply (5);

counter. divide (2);

console.log(counter. value ());

|  |
| --- |
| **counter.js**  // Author : Ngshah3  //is a non-negative integer and initialized with 1  let privateCounter = 1;  //The module’s three functions:  //1  module.exports.multiply = function (num) {    privateCounter = privateCounter \* num;    return;  };  //2  module.exports.divide = function (num) {    privateCounter = privateCounter / num;    if (privateCounter < 1) {      privateCounter = 1;    }    return;  };  //3  module.exports.value = function () {    return privateCounter;  };  **test.js**  var counter = require("./counter");  //TESTING  counter.multiply(15);  counter.divide(2);  console.log(counter.value());  counter.multiply(5);  counter.divide(2);  console.log(counter.value()); |

# Question 2 (5 Marks):

Given the following code for server.js - fill in the blanks to ensure that it functions correctly when executed.

*// Author : Ngshah3*

**var** express = require ("express");

**var** app = express();

**var** path = require ("path");

**var** HTTP\_PORT = process.env.PORT|| 8080;

*// call this function after the http server starts listening for requests*

**function** onHttpStart() {

console.log("Express http server listening on: " + HTTP\_PORT);

}

*// setup a 'route' to listen on the default url path (http://localhost)*

app.get ( "/" , **function**(req,res){

res.send ("Hello World<br /><a href='/about'>Go to the about page</a>");

});

*// setup another route to listen on /about*

app.get ( "/about", **function**(req,res){

res.send (path.join(\_\_dirname + "/views/about.html"));

});

*// setup http server to listen on HTTP\_PORT*

app.listen(HTTP\_PORT, onHttpStart);