

Part 1. Multiple Choice. 10pts

- Which statement executes the code of sample.js file?
 - nodejs sample.js
 - node sample.js
 - Sample.js
 - None of the above
- How can we create an instance of the "express" module?
 - const express = require("express");
 - const express = new require("express");
 - const express = new express();
 - None of the above
- How can we check the current version of NPM?
 - npm --version
 - npm --ver
 - npm help
 - None of the above
- To install Node.js express module
 - npm install express
 - node install express
 - install express
 - None of above
- package.json is used to define the properties of a package?
 - True
 - False
- Objects are lists of values similar to arrays, except values are identified by keys instead of integers.
 - True
 - False
- Which of the following is not a valid Javascript function statement?
 - A function can be declared to receive any number of arguments.
 - Arguments can be from any type.
 - An argument could be a string, a number, an array, an object and even another function.
 - None of above
- JSON stands for _____.
 - Java Standard Output Network
 - JavaScript Object Notation
 - JavaScript Output Name
 - Java Source Open Network
- What is the git command that downloads your repository from GitHub to your computer?
 - git push
 - git fork
 - git clone
 - git commit
- How do you check the state of your local git repository since your last commit?
 - git check
 - git status
 - git commit
 - git diff

NOTE: Make sure to update your README.md for your answers here in Part 1

Part 2. True or False. 10pts

- _____. By committing the staged changes with `git commit` is the way to save the current state of the code into the git version control.
- _____. In Express.js, apps can also be mounted to paths that contain a variable by prepending a `:` to the beginning of a variable name.
- _____. We utilize the `app.use(express.static('public'))` script to call and use static middleware.
- _____. Using `git commit` to create empty Git repo in a specified directory and initialize the current directory as a git repository
- _____. Using `git merge` to merge `<branch>` into the current branch.
- _____. Using `git remote` to create a new connection to a remote repo.
- _____. Using `git fetch` to fetch the specified remote's copy of current branch and immediately merge it into the local copy.
- _____. We use `git config --global user.email <name>` to define the author name to be used for all commits by the current user.
- _____. We use `git push <remote> --all` to push all your local branches to the specified remote.
- _____. We use `git log` to display the entire commit history using the default format.

NOTE: Make sure to update your README.md for your answers here in Part 2

Part 3. Version Control using Git and Github.

Instructions: In this part of the exam, we will restructure our **WEBDEV2** repository and create new repository **midtermexam**. See <https://github.com/cbataic/midtermexam> for the complete details.

NOTE: Make sure to update your README.md for your answers here in Part 3

Part 4. Web Server Programming

Using HR Schema, create an express application that displays the query result in two outputs (console and webpage). Consider using aggregate and user-defined function for the following tasks:

Task	Console Script	Slug (URI endpoint)
Write a query to calculate total number of jobs available.	<code>npm run lastname_part4_1.js</code>	<code><192.168.202.xxx>/lastname/1</code>
Write a query to compute the average salary offered to employees.	<code>npm run lastname_part4_2.js</code>	<code><192.168.202.xxx>/lastname/2</code>
Write a query to display the total salary from the employee table.	<code>npm run lastname_part4_3.js</code>	<code><192.168.202.xxx>/lastname/3</code>
Write a query to find which employee's last name comes first in the alphabet	<code>npm run lastname_part4_4.js</code>	<code><192.168.202.xxx>/lastname/4</code>
Write a query to find which employee's last name comes last in the alphabet.	<code>npm run lastname_part4_5.js</code>	<code><192.168.202.xxx>/lastname/5</code>
Write a query to calculate the maximum salary of all departments.	<code>npm run lastname_part4_6.js</code>	<code><192.168.202.xxx>/lastname/6</code>
Write a query to determine how many employees are in each department.	<code>npm run lastname_part4_7.js</code>	<code><192.168.202.xxx>/lastname/7</code>
Write a query to determine the average of the maximum salaries of all departments.	<code>npm run lastname_part4_8.js</code>	<code><192.168.202.xxx>/lastname/8</code>
Write a query to show the number of jobs available in the employees table.	<code>npm run lastname_part4_9.js</code>	<code><192.168.202.xxx>/lastname/9</code>
Write a query to get the average salary and number of employees working the department 90.	<code>npm run lastname_part4_10.js</code>	<code><192.168.202.xxx>/lastname/10</code>
Write a query to get list of first 10 records in employees table	<code>npm run lastname_part4_emp.js</code>	<code><192.168.202.xxx>/lastname/emp</code>
Write a query to get list of first 10 records in departments table	<code>npm run lastname_part4_dept.js</code>	<code><192.168.202.xxx>/lastname/dept</code>
Write a query to get list of first 10 records in jobs table	<code>npm run lastname_part4_jobs.js</code>	<code><192.168.202.xxx>/lastname/jobs</code>
Write a query to get list of first 10 records in locations table	<code>npm run lastname_part4_loc.js</code>	<code><192.168.202.xxx>/lastname/loc</code>

NOTE: Make sure to update your README.md for your answers here in Part 4

Note: Extra points (at most 20) for those webpages that uses custom style using CSS3.