

## Lesson 1 Demo 1

### Write and Execute JavaScript Program Using Node

**Objective:** To write and execute JavaScript program using node

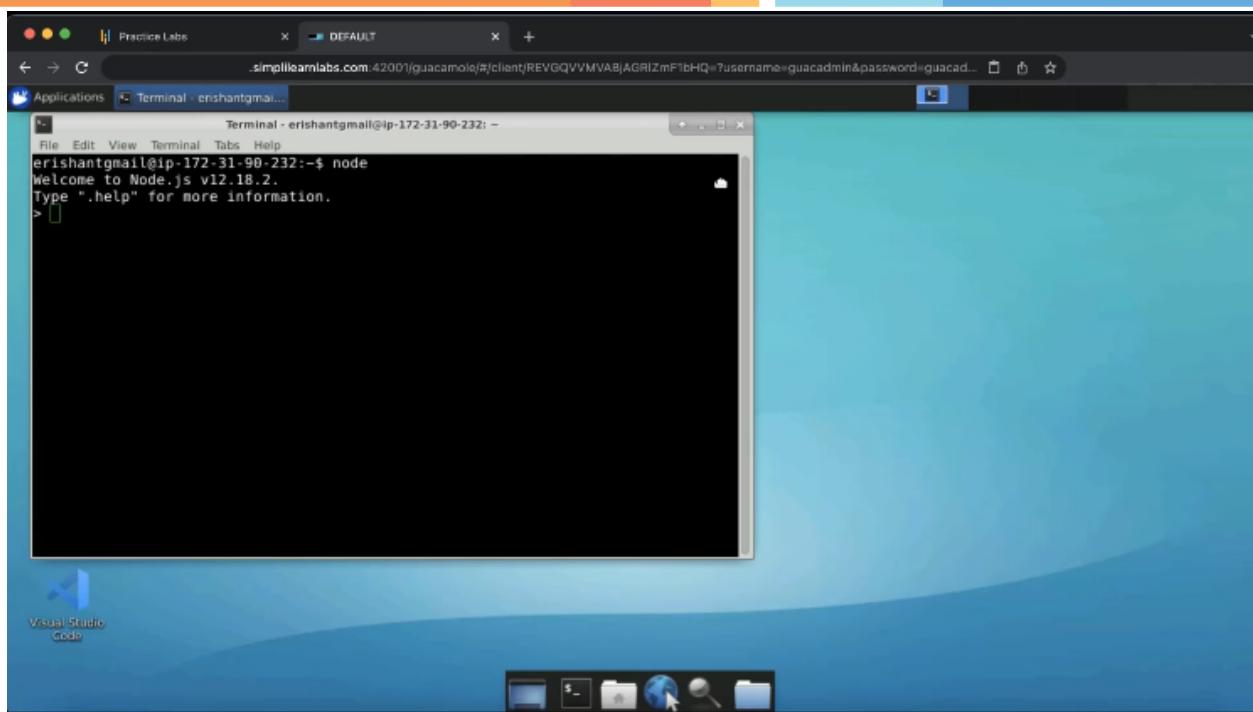
**Prerequisites:** None

Steps to be followed:

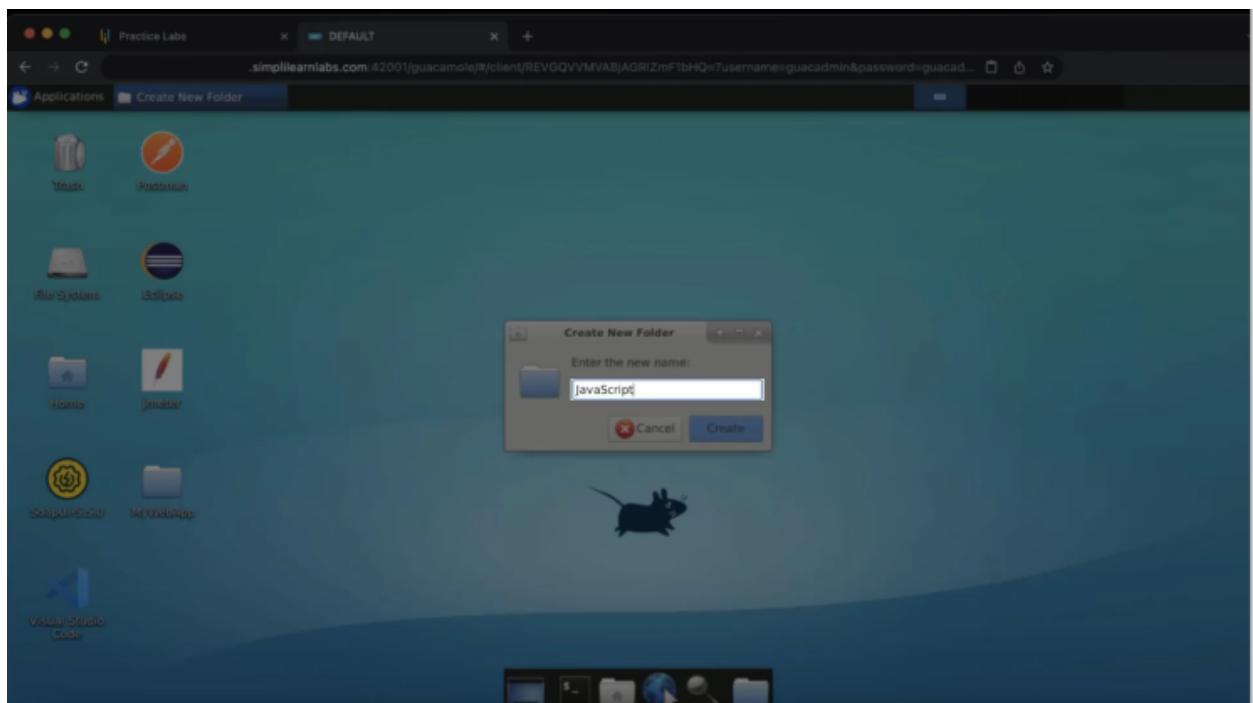
- Check the installation of node and create a project directory
- Write and execute JavaScript program using Node

#### Step 1: Check the installation of node and create a project directory

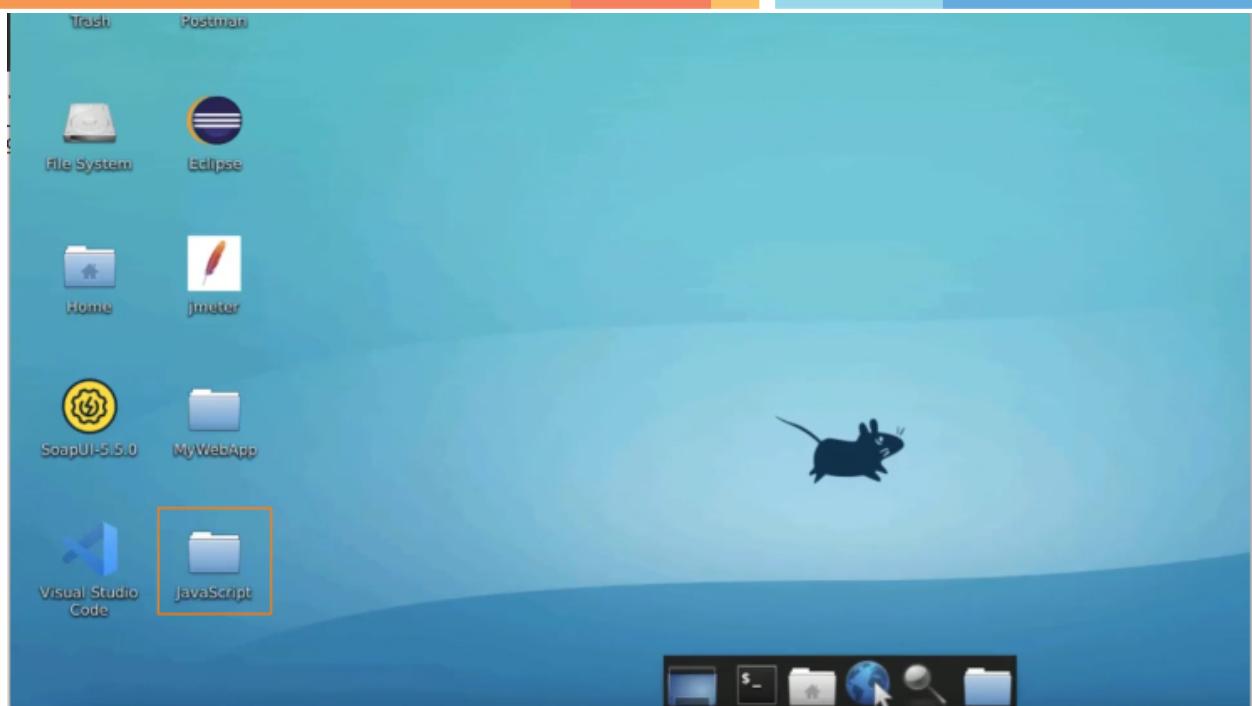
1.1 Check if the node is installed or not.



1.2 Create a folder named 'javaScript'.

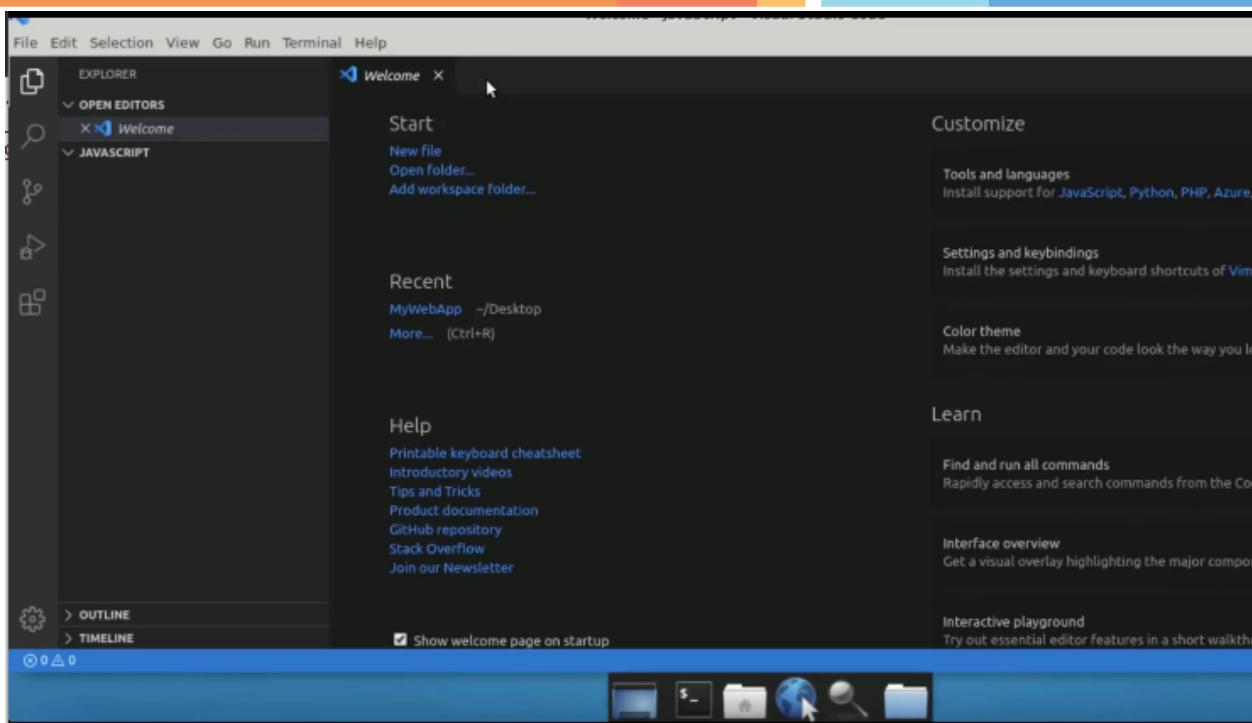


1.3 Save the program in the shown directory.

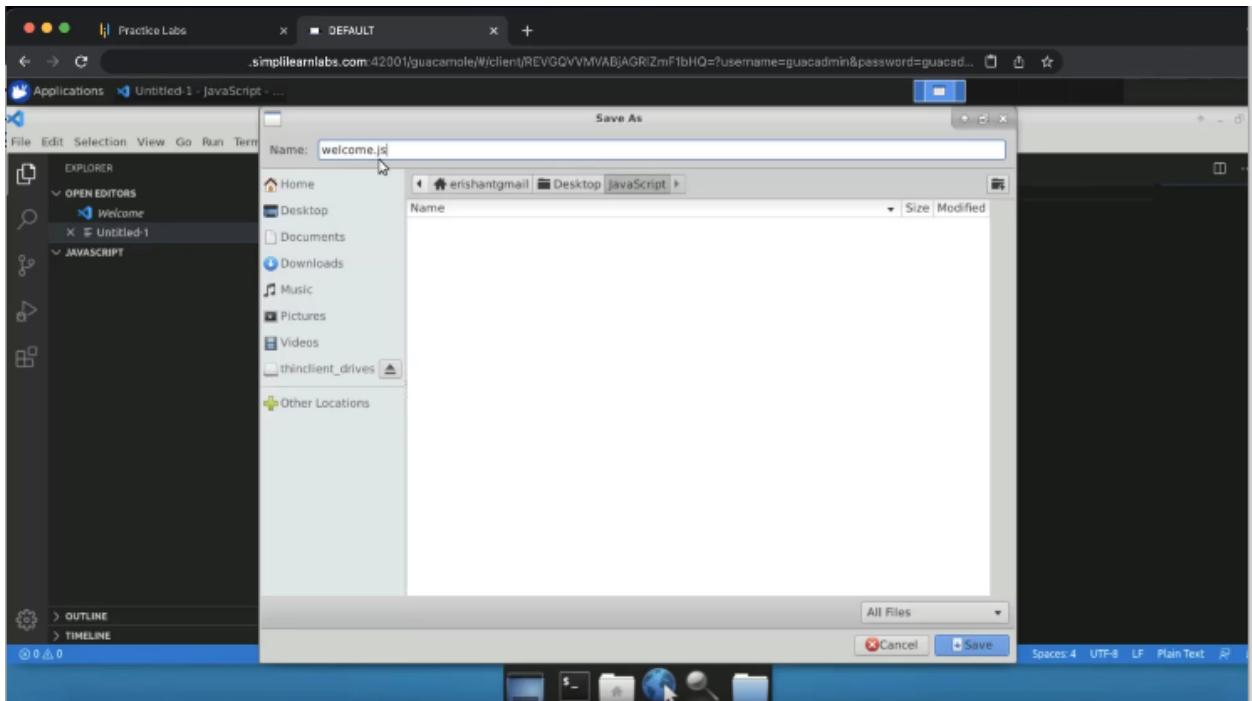


## Step 2: Write and execute JavaScript program using Node

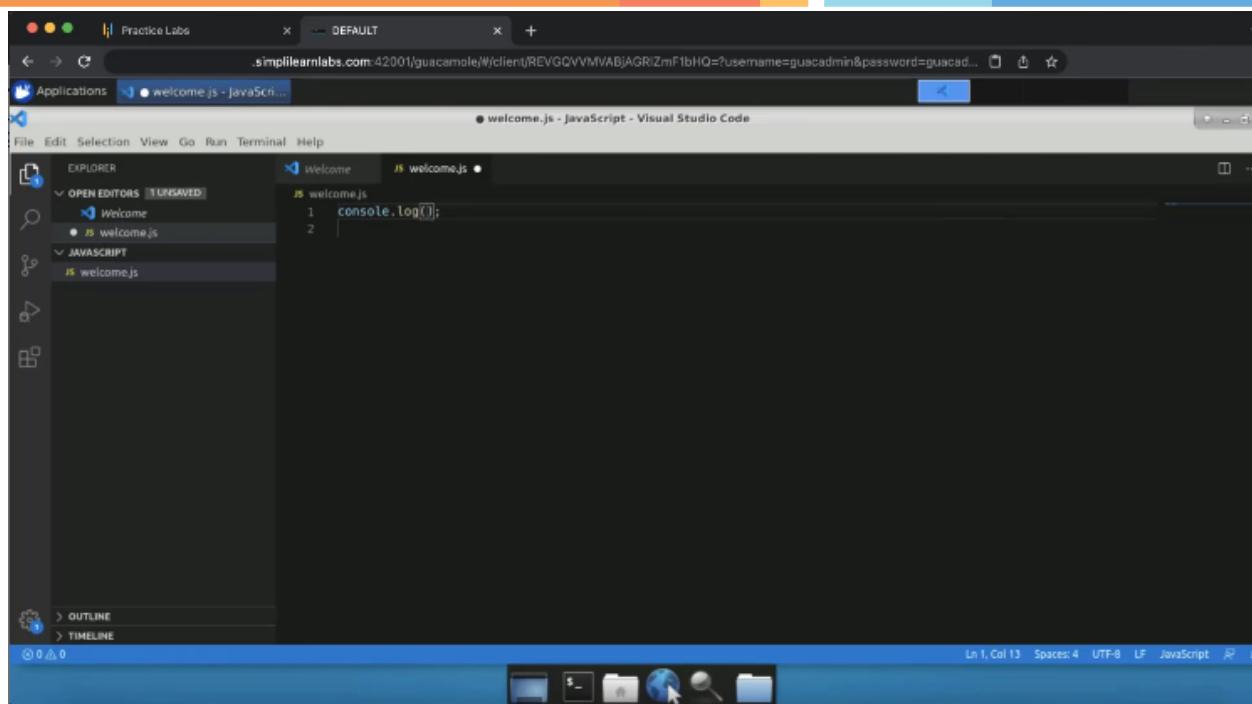
2.1 Open the visual studio code.



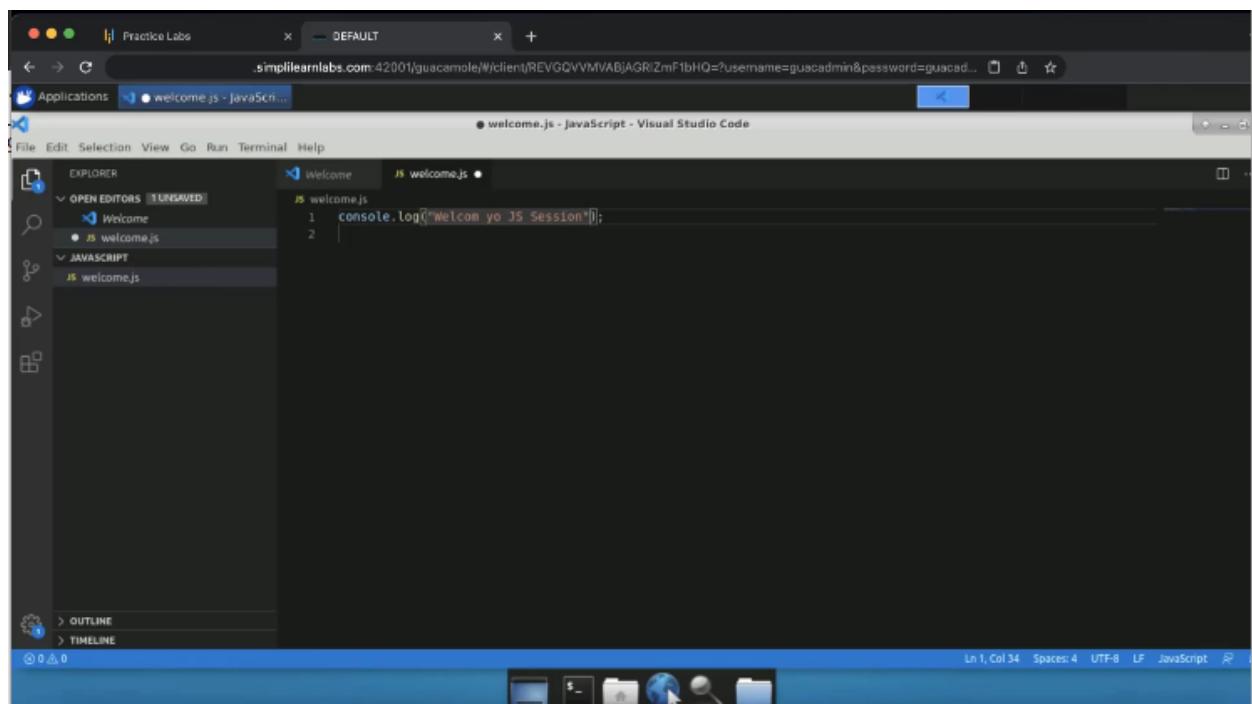
## 2.2 Create a program named 'welcome.js'.



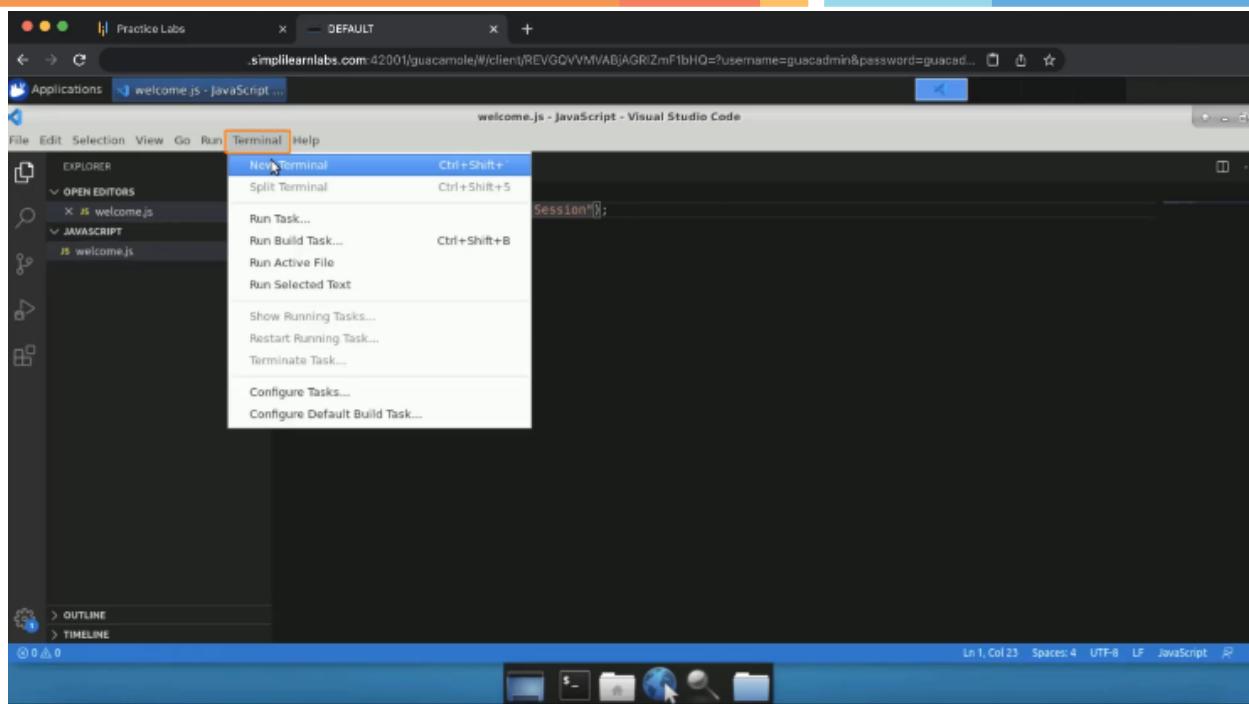
## 2.3 Write the first printing statement.



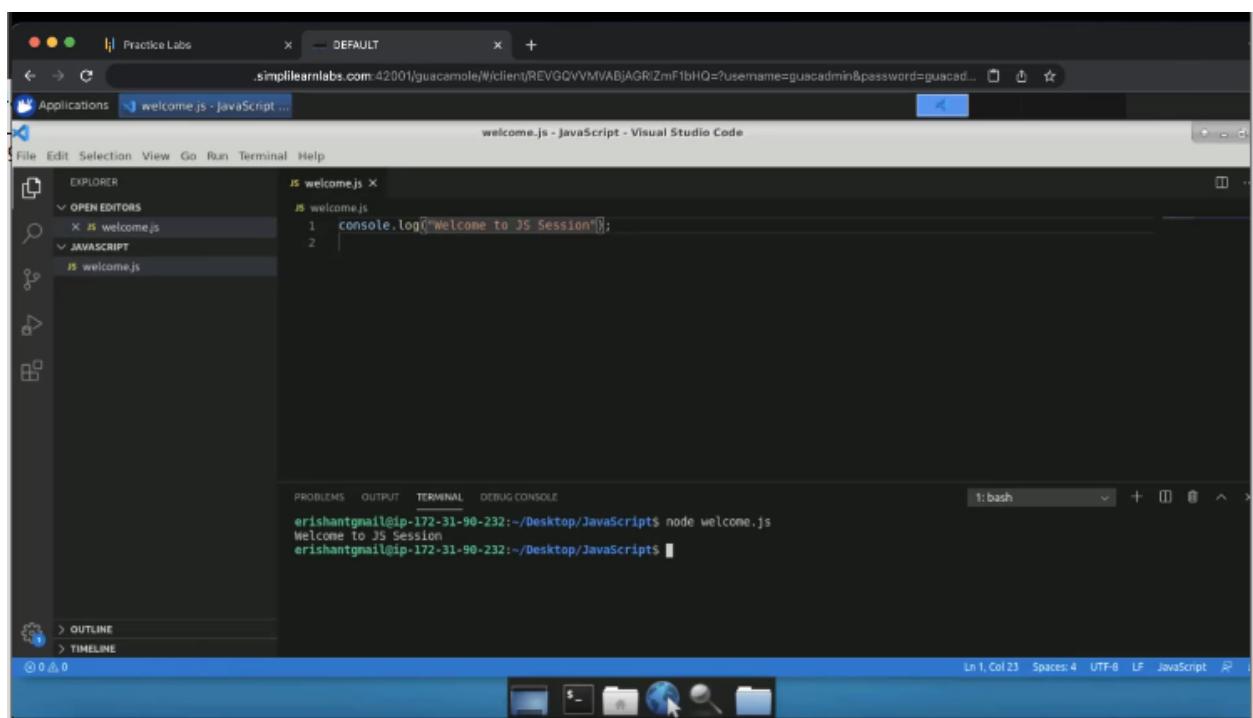
## 2.4 Write 'Welcome to JS Session' and save the file.



## 2.5 Open the terminal window.



2.6 Mention the name of the program preceding the node and hit enter.



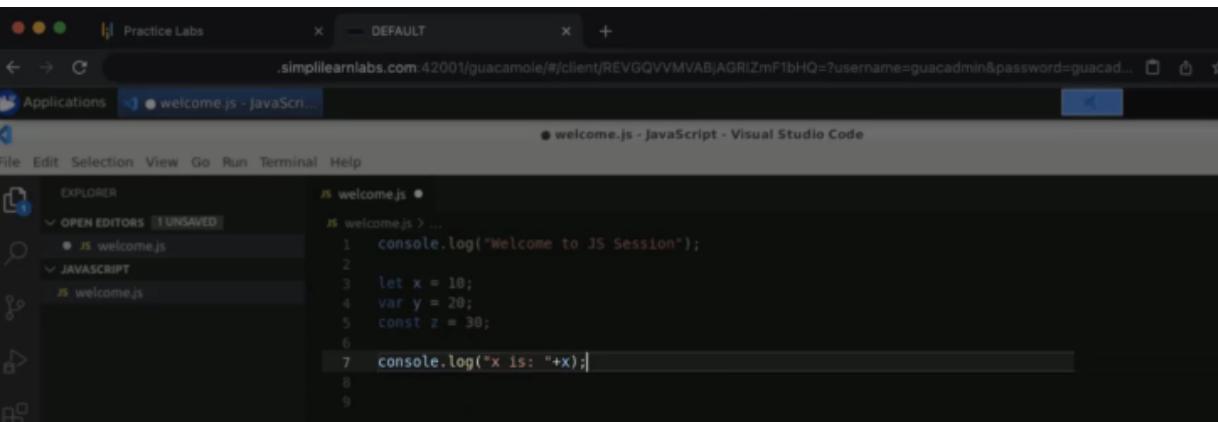
2.7 Create a storage container with x as 10, var y as 20, and const z as 30.

The screenshot shows a Visual Studio Code interface with the following details:

- Title Bar:** Practice Labs - DEFAULT
- Address Bar:** simplilearnlabs.com:42001/guacamole/#/client/REVOQVVMVABjAGRIZmF1bHQ=?username=guacadmin&password=guacad...
- File Explorer (Left):** Shows an open editor for 'welcome.js' and a list of other files and folders.
- Code Editor (Center):** Displays the following JavaScript code:

```
1 console.log("Welcome to JS Session");
2
3 let x = 10;
4 var y = 20;
5 const z = 30;
```
- Terminal (Bottom):** Shows the output of running the script with node welcome.js, displaying "Welcome to JS Session".

2.8 Write ‘log x is +x’.



The screenshot shows a Visual Studio Code interface with the following details:

- Title Bar:** Practice Labs - DEFAULT
- Address Bar:** .simplelearnlabs.com:42001/guacamole/#/client/REVGQVVMVABjAGRIZnF1bHQ=?username=guacadmin&password=guacd...
- File Explorer:** Shows 'OPEN EDITORS' (1 UNSAVED) with 'welcome.js' selected. It also lists 'welcome.js' under 'JAVASCRIPT'.
- Code Editor:** Displays the 'welcome.js' file content:

```
1 console.log("Welcome to JS Session");
2
3 let x = 10;
4 var y = 20;
5 const z = 30;
6
7 console.log("x is: "+x);
8
9
```
- Terminal:** Shows the output of running the script: "Welcome to JS Session".
- Status Bar:** 1: bash

2.9 Concatenate y and z as well like x.

The screenshot shows a Visual Studio Code interface. The title bar says "Practice Labs" and "DEFAULT". The address bar shows ".simplilearnlabs.com 42001/guacamole/#/client/REVGQVVMVAB/AGRIZmF1bHQ=?username=guacadmin&password=guacd...". The editor window contains a file named "welcome.js" with the following code:

```

1 console.log("Welcome to JS Session");
2
3 let x = 10;
4 var y = 20;
5 const z = 30;
6
7 console.log("x is: "+x);
8 console.log("y is: "+y);
9 console.log("z is: "+z);
10
11

```

The terminal below shows the output of running the script:

```

erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node welcome.js
Welcome to JS Session
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ 

```

2.10 Pass 'node welcome.js' again in the terminal and hit enter.

The screenshot shows the same Visual Studio Code interface as before. The terminal now shows the output of running the script again:

```

erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node welcome.js
Welcome to JS Session
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node welcome.js
Welcome to JS Session
x is: 10
y is: 20
z is: 30
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ 

```

The status bar at the bottom right indicates "Ln 5, Col 14 Spaces: 4 UTF-8".

## 2.11 Check the datatype of x, y, and z.

```
JS welcome.js •  
1 UNSAVED  
e.js  
JS welcome.js > ...  
1 console.log("Welcome to JS Session");  
2  
3 let x = 10;  
4 var y = 20;  
5 const z = 30;  
6  
7 console.log("x is: "+x+" and data type is: "+typeof x);  
8 console.log("y is: "+y+" and data type is: "+typeof x);  
9 console.log("z is: "+z+" and data type is: "+typeof x);  
10  
11  
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE 1:bash  
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node welcome.js  
Welcome to JS Session  
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node welcome.js  
Welcome to JS Session  
x is: 10  
y is: 20  
z is: 30  
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$  
Ln 9, Col 56 Spaces: 4 UTF-8  
File Explorer Terminal Search icon
```

## 2.12 Check the output in the terminal again.

```
JS welcome.js ✘  
e.js  
JS welcome.js > ...  
1 console.log("Welcome to JS Session");  
2  
3 let x = 10;  
4 var y = 20;  
5 const z = 30;  
6  
7 console.log("x is: "+x+" and data type is: "+typeof x);  
8 console.log("y is: "+y+" and data type is: "+typeof x);  
9 console.log("z is: "+z+" and data type is: "+typeof x);  
10  
11  
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE 1:bash  
Welcome to JS Session  
x is: 10  
y is: 20  
z is: 30  
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node welcome.js  
Welcome to JS Session  
x is: 10 and data type is: number  
y is: 20 and data type is: number  
z is: 30 and data type is: number  
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$  
Ln 9, Col 56 Spaces: 4 UTF-8  
File Explorer Terminal Search icon
```

2.13 Change var y to 20.22 and create a string for cost z as 'George'. Execute the program.

```
js welcome.js X
js welcome.js > ...
1  console.log("Welcome to JS Session");
2
3  let x = 10;
4  var y = 20.22;
5  const z = "George";
6
7  console.log("x is: "+x+" and data type is: "+typeof x);
8  console.log("y is: "+y+" and data type is: "+typeof y);
9  console.log("z is: "+z+" and data type is: "+typeof z);
10
11

PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE
1: bash
Welcome to JS Session
x is: 10 and data type is: number
y is: 20.22 and data type is: number
z is: George and data type is: number
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node welcome.js
Welcome to JS Session
x is: 10 and data type is: number
y is: 20.22 and data type is: number
z is: George and data type is: string
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$
```