

Lesson 1 Demo 1

Write and Execute JavaScript Program Using Node

Objective: To write and execute JavaScript program using node

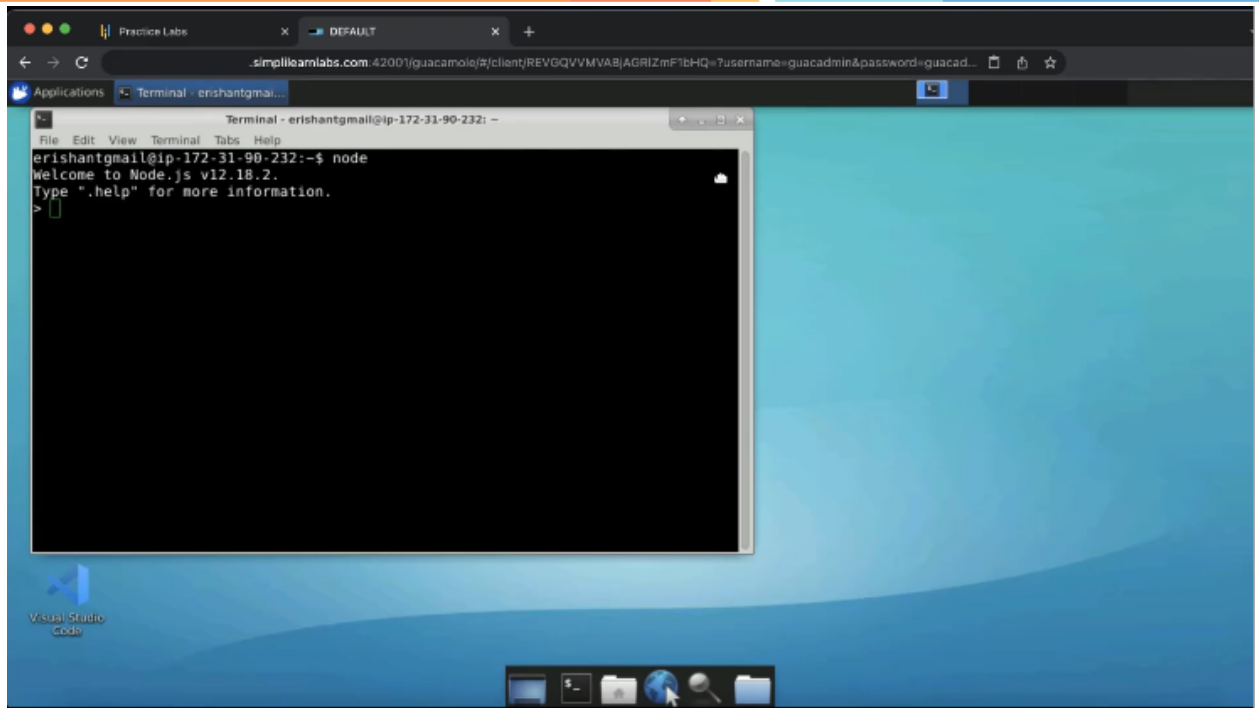
Prerequisites: None

Steps to be followed:

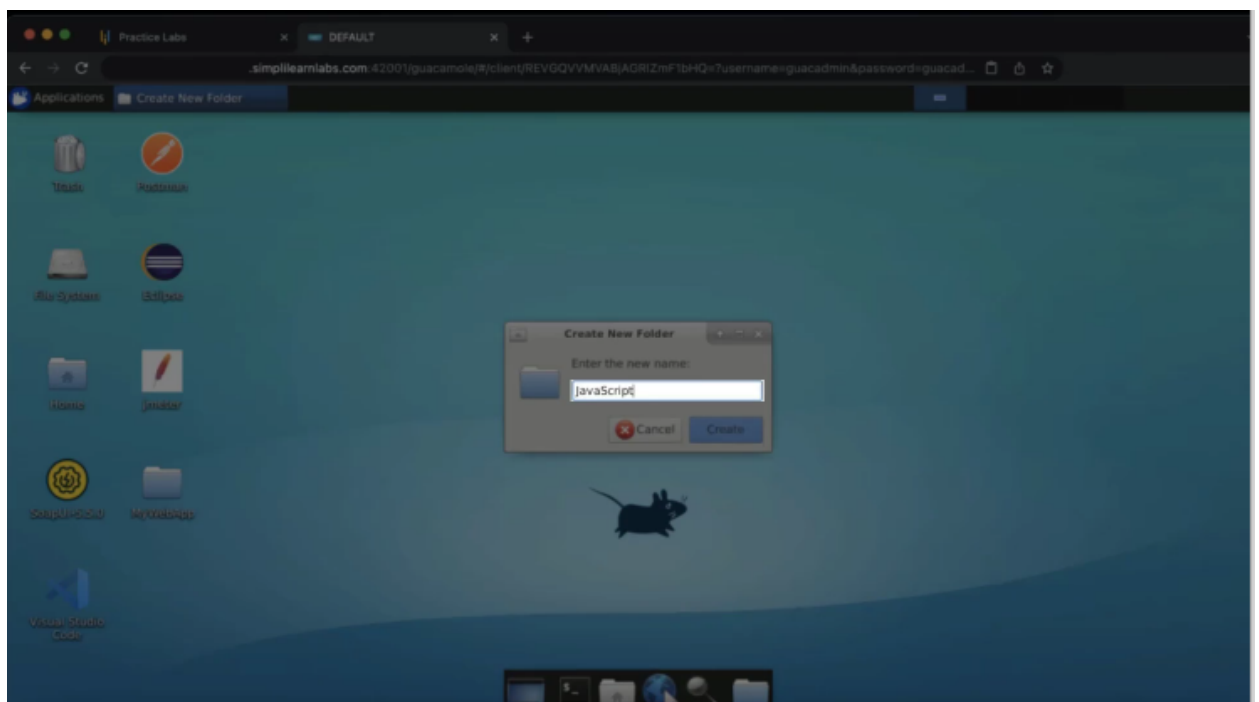
- Check the installation of node and create a project directory
- Write and execute JavaScript program using Node

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

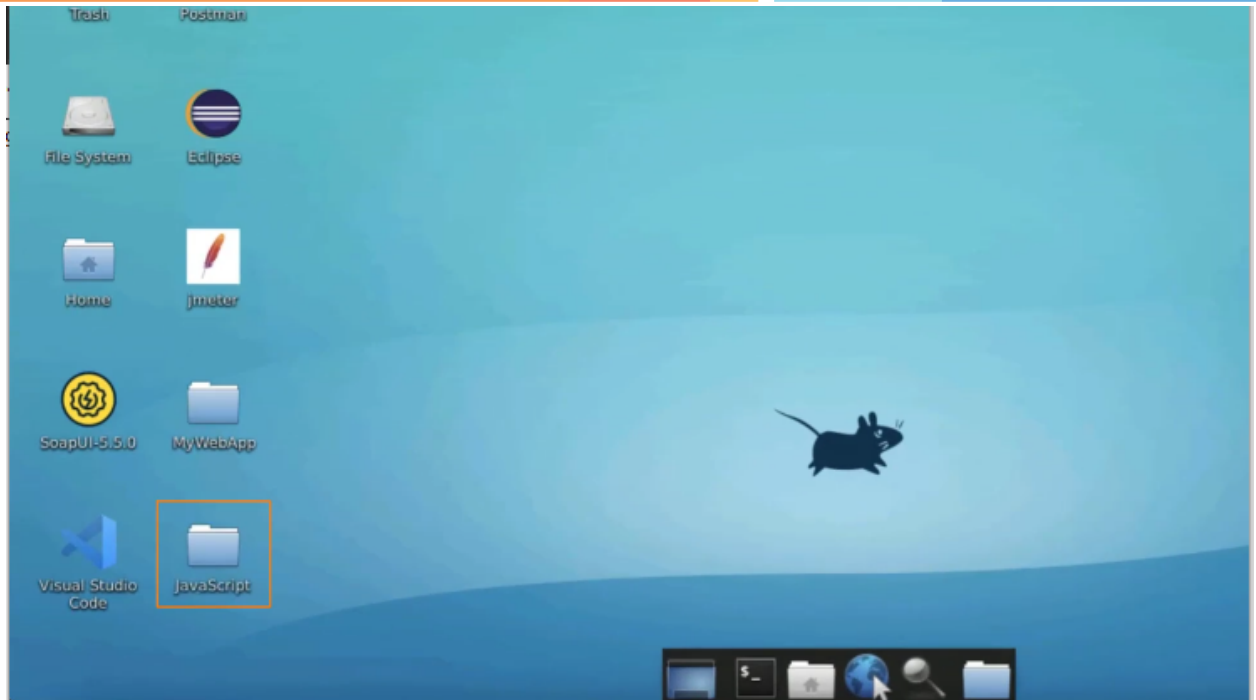
1.1 Check if the node is installed or not.



1.2 Create a folder named 'JavaScript'.

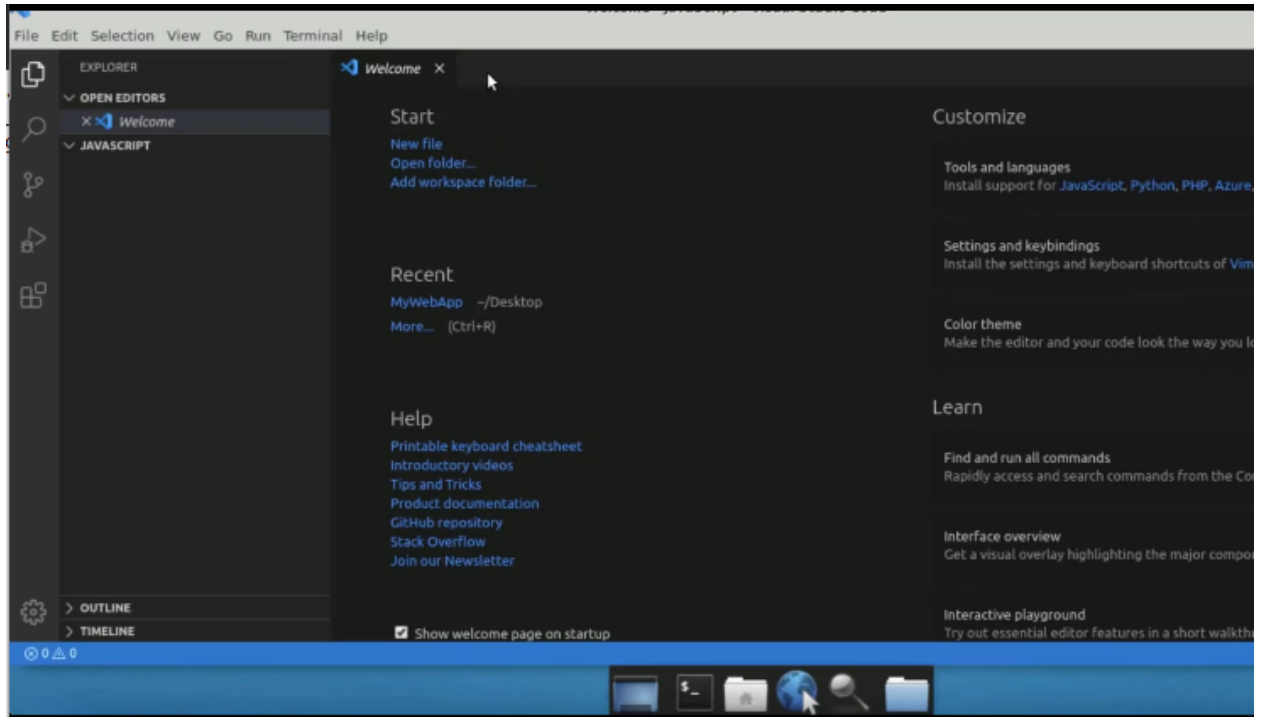


1.3 Save the program in the shown directory.

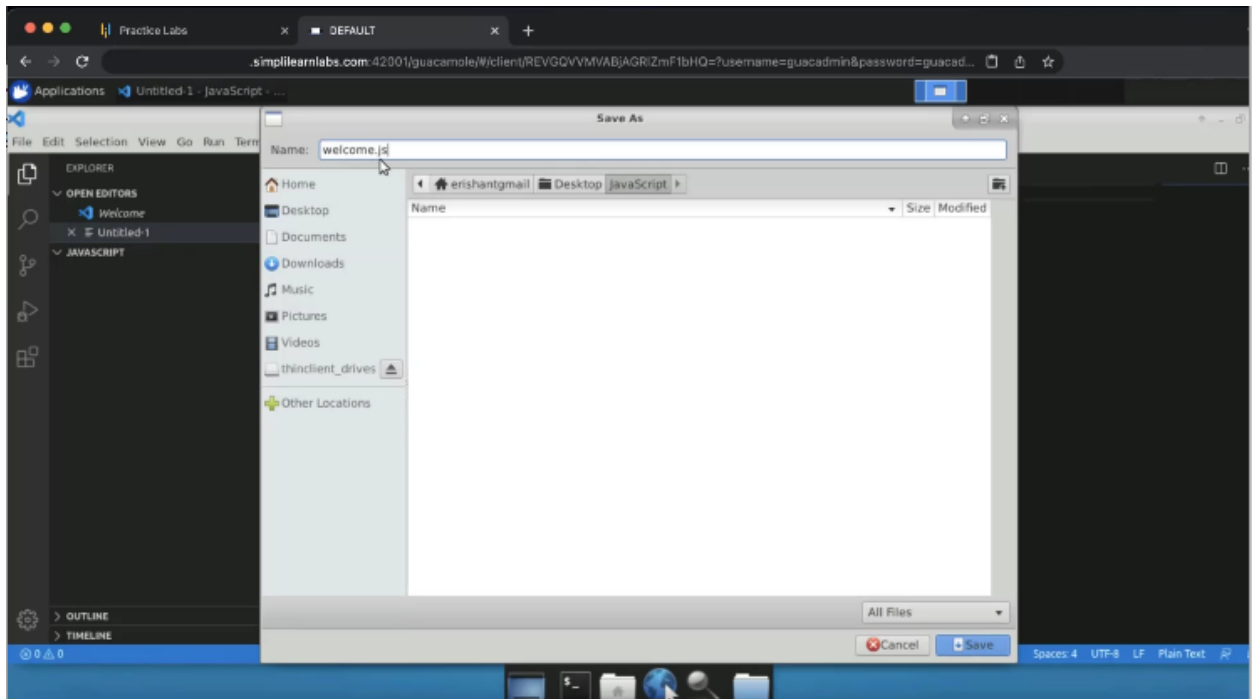


Step 2: Write and execute JavaScript program using Node

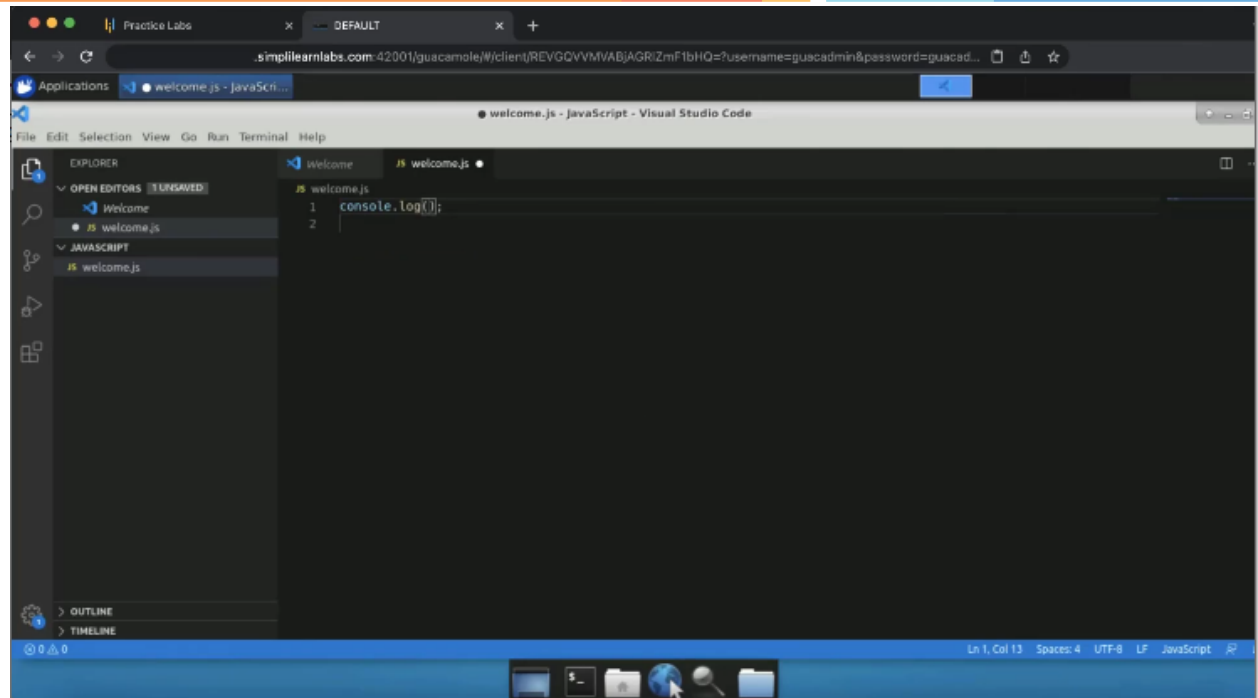
2.1 Open the visual studio code.



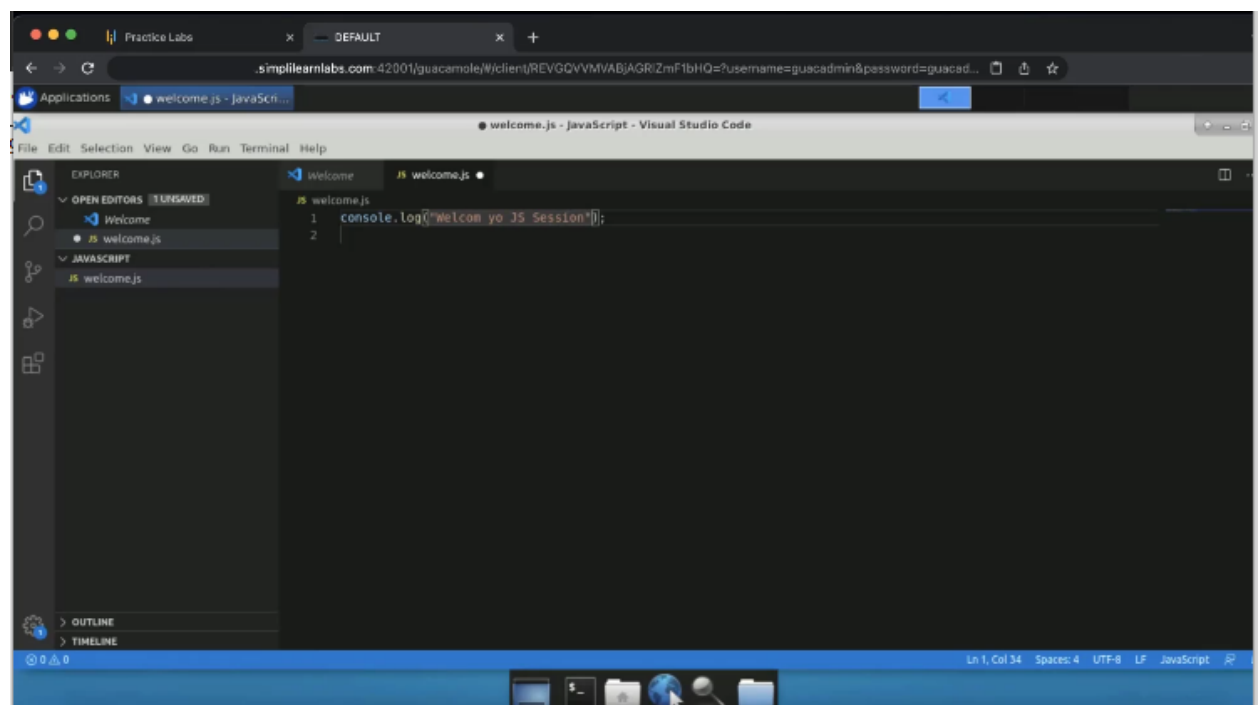
2.2 Create a program named 'welcome.js'.



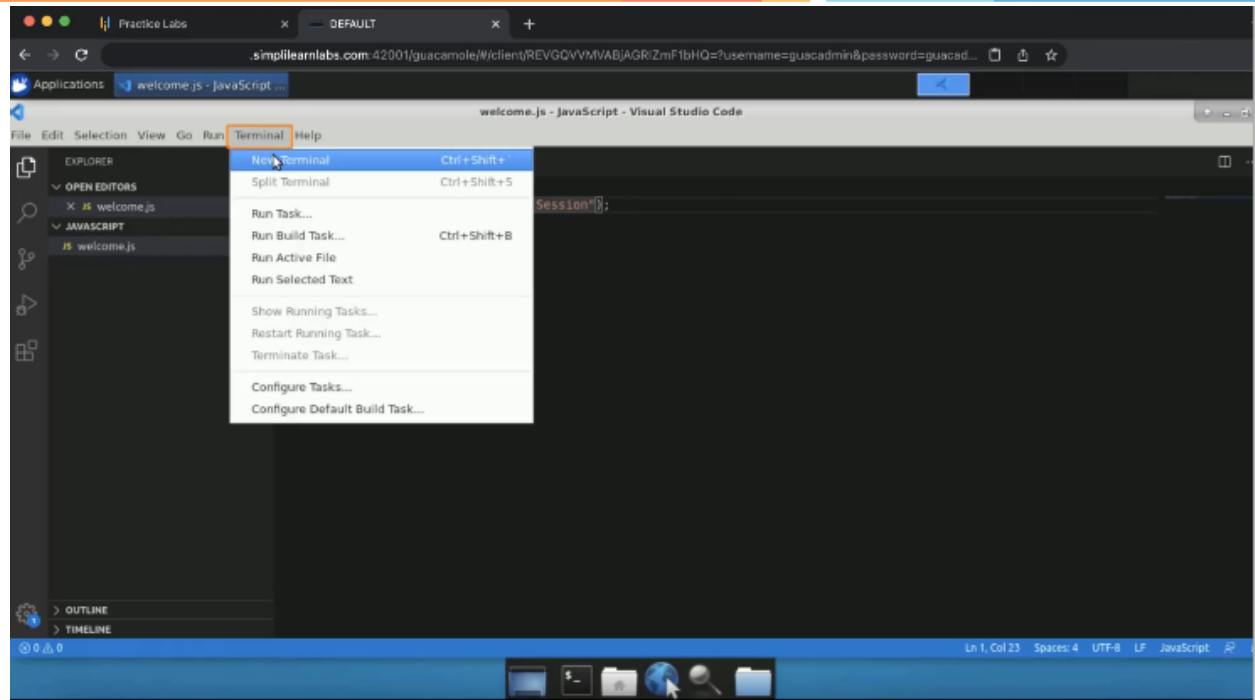
2.3 Write the first printing statement.



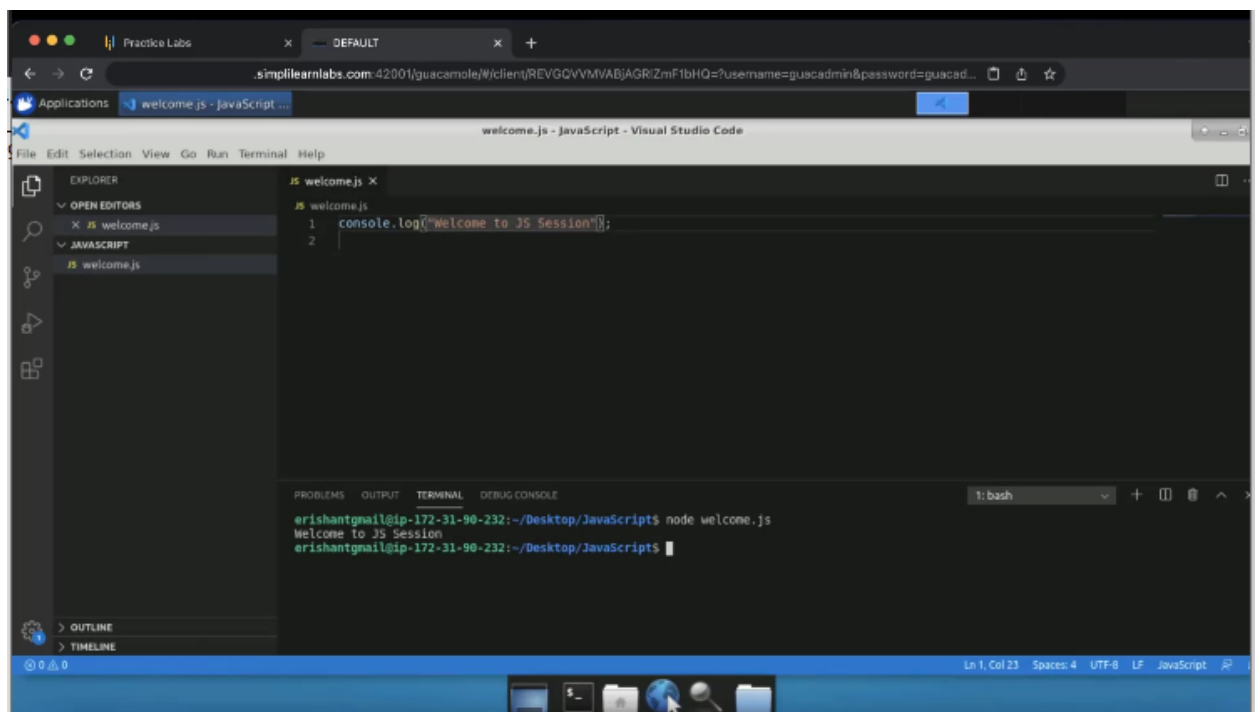
2.4 Write 'Welcome to JS Session' and save the file.



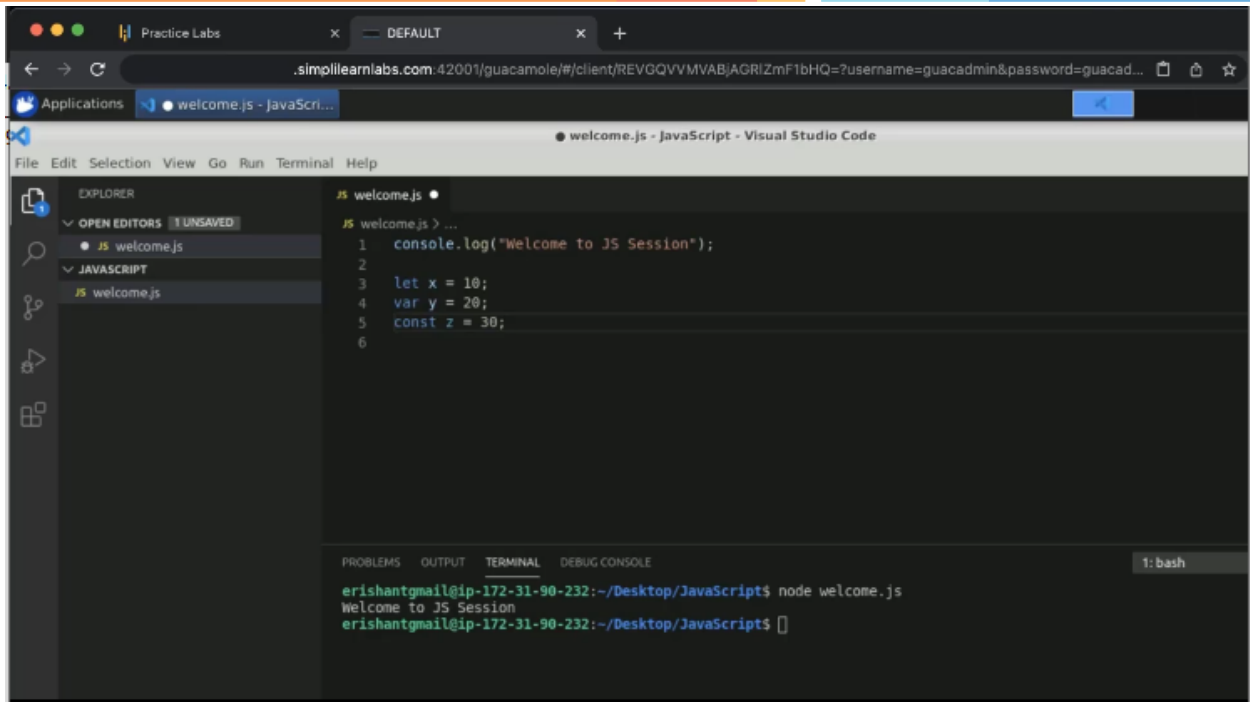
2.5 Open the terminal window.



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.

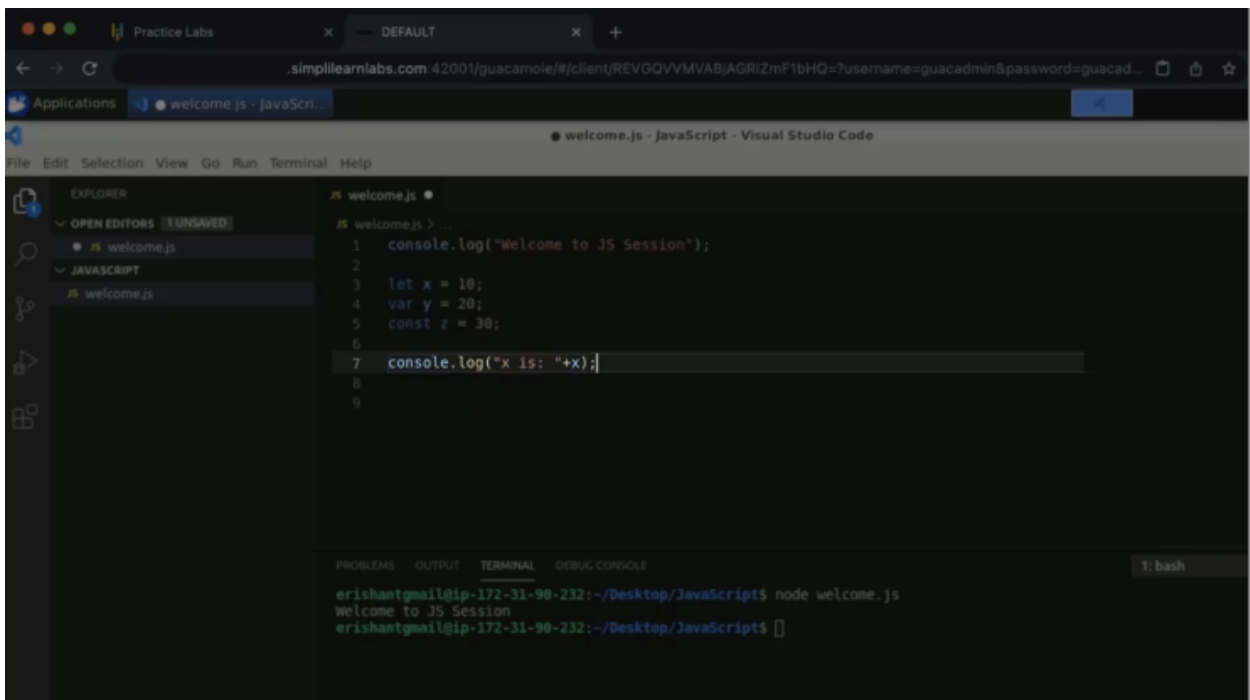


The screenshot shows the Visual Studio Code interface. The Explorer panel on the left shows a file named 'welcome.js' under the 'JAVASCRIPT' folder. The main editor area shows the following code in 'welcome.js':

```
1 console.log("Welcome to JS Session");
2
3 let x = 10;
4 var y = 20;
5 const z = 30;
6
```

The TERMINAL panel at the bottom shows the command 'node welcome.js' being executed, resulting in the output 'Welcome to JS Session'.

2.8 Write 'log x is +x'.

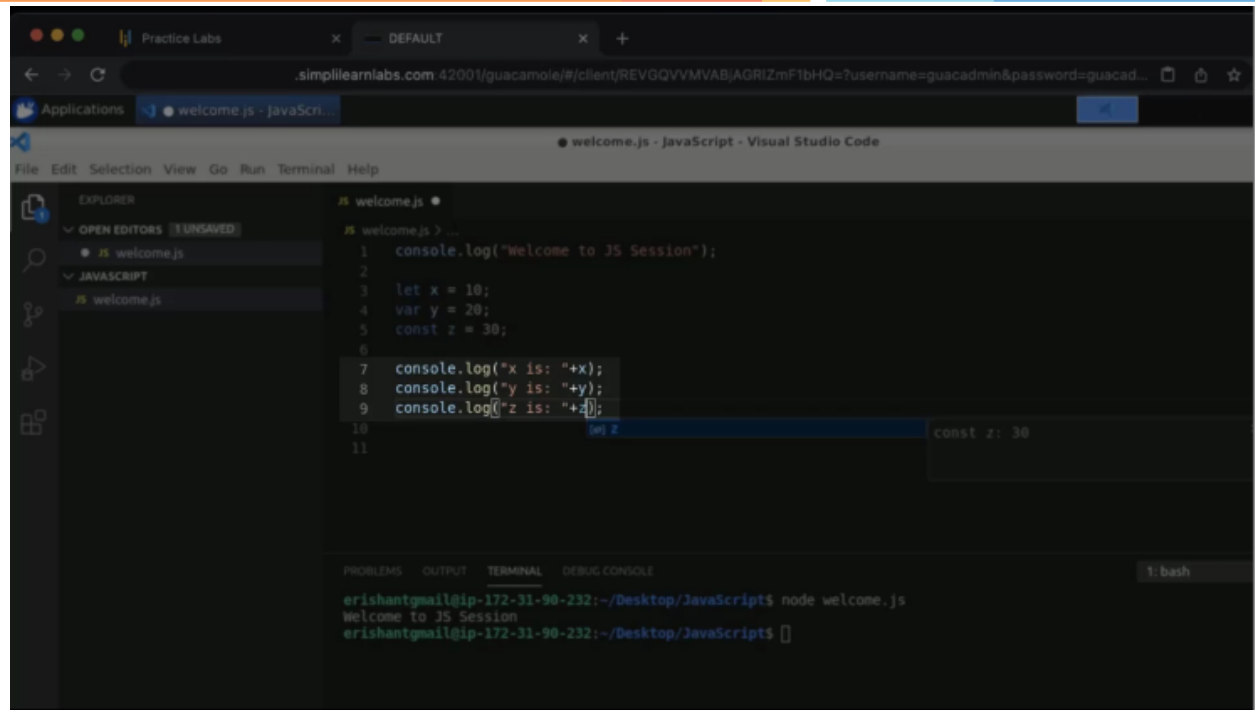


The screenshot shows the Visual Studio Code interface. The Explorer panel on the left shows a file named 'welcome.js' under the 'JAVASCRIPT' folder. The main editor area shows the following code in 'welcome.js':

```
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);
8
9
```

The TERMINAL panel at the bottom shows the command 'node welcome.js' being executed, resulting in the output 'Welcome to JS Session' and 'x is: 10'.

2.9 Concatenate y and z as well like x.

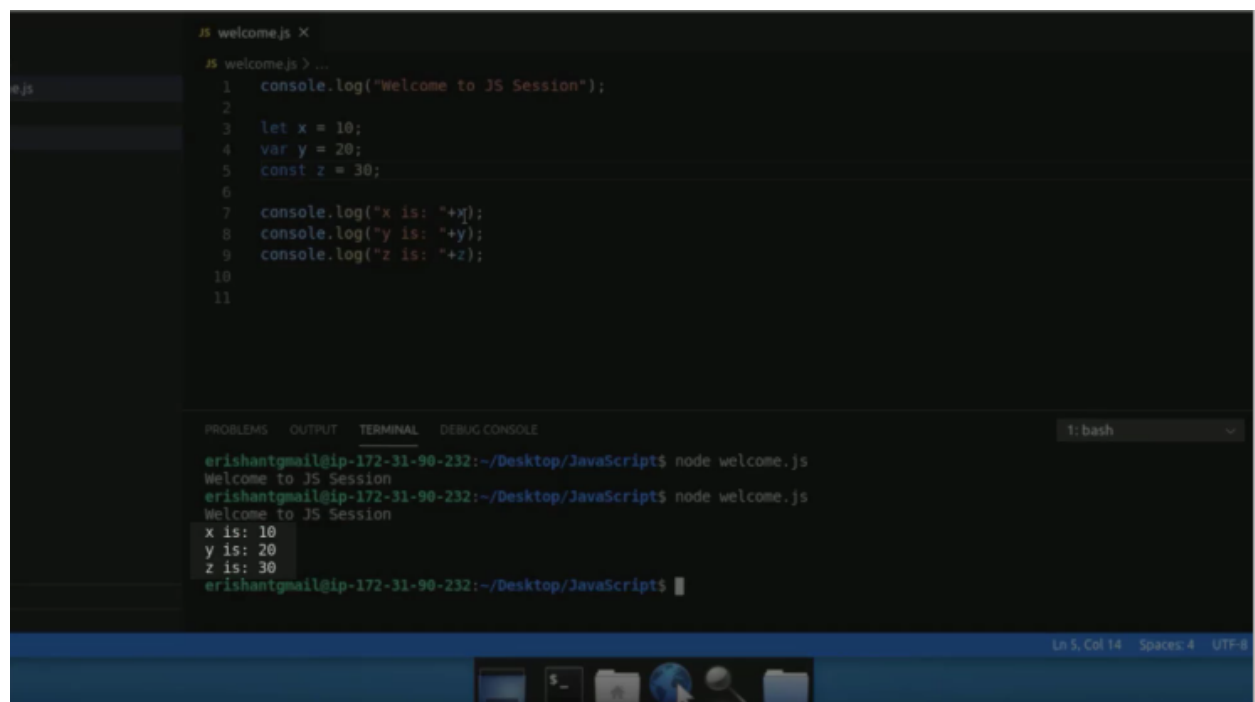


The screenshot shows the Visual Studio Code interface. The Explorer panel on the left shows a file named 'welcome.js' under the 'JAVASCRIPT' folder. The main editor area displays the content of 'welcome.js':

```
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);
8 console.log("y is: "+y);
9 console.log("z is: "+z);
10
11
```

The terminal window at the bottom shows the command 'node welcome.js' being executed, resulting in the output 'Welcome to JS Session'.

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



The screenshot shows the Visual Studio Code interface with the 'welcome.js' file open. The terminal window at the bottom shows the command 'node welcome.js' being executed again, resulting in the output 'Welcome to JS Session'.

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


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

The screenshot shows a VS Code editor with a file named `welcome.js` open. The code in the file is as follows:

```

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

```

The terminal output shows the execution of the script:

```

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

```

2.12 Check the output in the terminal again.

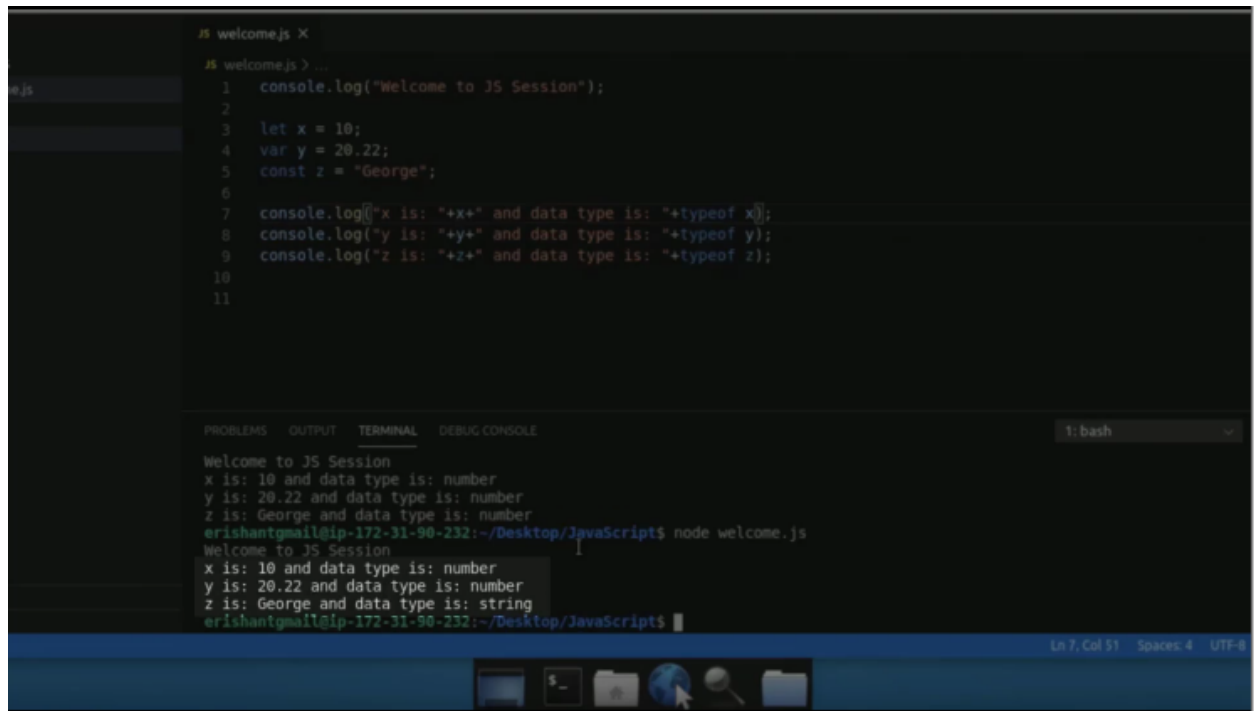
The screenshot shows the same VS Code editor with the `welcome.js` file. The terminal output is the same as in the previous screenshot, but the output lines are highlighted in green:

```

Welcome to JS Session
x is: 10
y is: 20
z is: 30
erishantgmail@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
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

2.13 Change var y to 20.22 and create a string for const 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$
```

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