CS571 – Cloud computing Infrastructure

Week - 2 Homework – 2

Q8. Node.js Time Server on Ubuntu.

Answer:

Setup Environment:

1. Install ubuntu on VirtualBox

    How to install Ubuntu on VirtualBox here

2. Install Node.js in Ubuntu OS in VirtualBox

    Open the VirtualBox and run Ubuntu guest Operating System

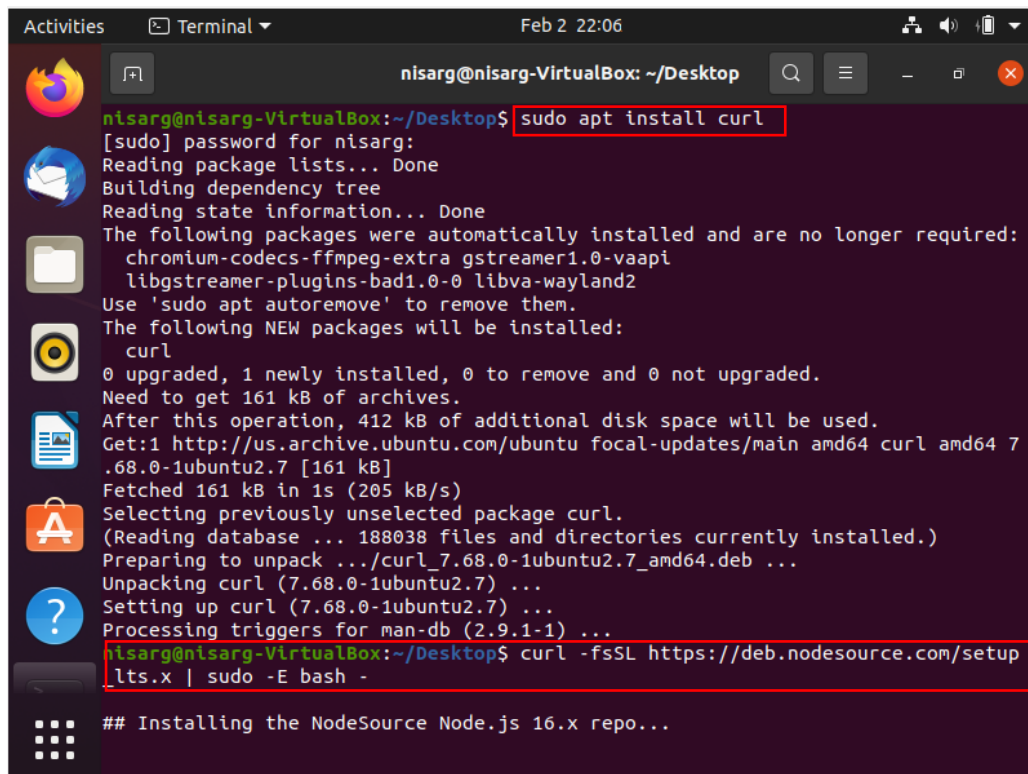   Open the Ubuntu terminal

3. Install Node.js with Ubuntu terminal by running curl

    sudo apt install curl

    curl -fsSL https://deb.nodesource.com/setup_16.x | sudo -E bash -

    sudo apt-get install -y nodejs

4. Verify that the Node.js and npm version

5. Install nvm (Node Version Manager)

   Curl -o- https://raw.githubusercontent.com/nvm-sh/nvm/v0.39.1/install.sh | bash

6. Now create the new file of timeserver.js with following program

```javascript
const http = require('http');


function addZero(i) {
   return (i < 10 ? '0' : '') + i
}
function now () {
   var date = new Date()
   return date.getFullYear() + '-'
      + addZero(date.getMonth() + 1) + '-'
      + addZero(date.getDate()) + ' '
      + addZero(date.getHours()) + ':'
      + addZero(date.getMinutes())
}
// Create an instance of the http server to handle HTTP requests
let server = http.createServer((req, res) => {
   // Set a response type of plain text for the response
   res.writeHead(200, {'Content-Type': 'text/plain'});

   // Send back a response and end the connection
   res.end(now()+'\n');
});
// Listening on the port provided on the command line
server.listen(Number(process.argv[2]))
console.log('Node server running on http://localhost:'+ process.argv[2]);
```
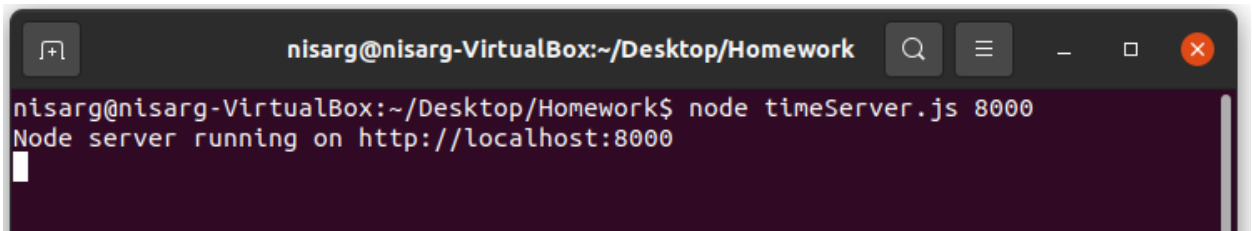
7. Open Ubuntu terminal and enter following command

   node time_server.js 8000

8. Open search engine and go to http://localhost:8000, you should see the following output

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