# Department of Computing

**CS-213: Advanced Programming**

**Class: BSCS 7AB**

# Lab 4: Introduction to Node.js

**Date: 26rd September, 2019**

**Time: 10:00-01:00pm & 02:00-05:00pm**

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# Lab 4: Introduction to Node.js

**Objectives**

This lab will get you familiar with the node.js environment.

**Lab Tasks**

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| Solution |
| Task 1: Download Node.js from the official Node.js web site: [https://nodejs.org](https://nodejs.org/).  Answer: Done.  Task 2: Once you have downloaded and installed Node.js on your computer, let's try to display "Hello World" in a web browser.  Answer:  var http= require("http");  http.createServer(function(req,res){  res.writeHead(200,{"Content-Type":"text/html"});  res.end("Hello WORLD");  }).listen(8080);    Task 3: Create a module that returns the current date and time. Save the code in a file called "myfirstmodule.js".  Answer:  exports.DateandTime=function(){  return Date();  }  Task 4: Use the module "myfirstmodule" of date and time in a Node.js file.  var http= require("http");  var date= require("./timedate");  http.createServer(function(req,res){  res.writeHead(200,{"Content-Type":"text/html"});  res.end(date.DateandTime());  }).listen(8080);    Task 5: The HTTP module can create an HTTP server that listens to server ports and gives a response back to the client. Use the createServer() method to create an HTTP server.  var http= require("http");  http.createServer(function(req,res){  res.writeHead(200,{"Content-Type":"text/html"});  res.end(“hello World”);  }).listen(8080);  Task 6: Add an HTTP Header  res.writeHead(200,{"Content-Type":"text/html"});  Task 7: Create a Node.js file that reads the HTML file, and return the content.  var http= require("http");  var fs= require ("fs");  http.createServer(function(req,res){  fs.readFile("calculator.html",function(err,data){  res.writeHead(200,{"Content-Type":"text/html"});  res.end(data);  });    }).listen(8080);    Task 8: Create a new file using   * appendFile() method   var http= require("http");  var fs= require ("fs");  fs.appendFile("file1.txt","Hello World",function(err){  if (err) throw err;  console.log ("Mubarik Ho");  })     * open() method   var http= require("http");  var fs= require ("fs");  fs.open("file2.txt","w",function(err,file){  if (err) throw err;  console.log ("Mubarik Ho");  })     * writeFile() method   var http= require("http");  var fs= require ("fs");  fs.writeFile("file3.txt","Hello",function(err){  if (err) throw err;  console.log ("Mubarik Ho");  })    Task 9: Append "This is my text." to the end of the file "mynewfile1.txt".  var http= require("http");  var fs= require ("fs");  fs.appendFile("file1.txt","This is my text",function(err){  if (err) throw err;  console.log ("Mubarik Ho");  })    Task 10: Replace the content of the file "mynewfile3.txt".  var http= require("http");  var fs= require ("fs");  fs.writeFile("file3.txt","YOLO",function(err){  if (err) throw err;  console.log ("Mubarik Ho");  })      Task11:  Delete "mynewfile2.txt".  var http= require("http");  var fs= require ("fs");  fs.unlink("file2.txt",function(err){  if (err) throw err;  console.log ("Mubarik Ho");  })    Task 12:  Rename "mynewfile1.txt" to "myrenamedfile.txt".  var http= require("http");  var fs= require ("fs");  fs.rename("file1.txt","NayaNaam.txt",function(err){  if (err) throw err;  console.log ("Mubarik Ho");  }) |