Q. Create a Node.js file that will convert the output "Hello World!" into upper-case letters.

```
Solution:
```

```
var http = require('http');
var uc = require('upper-case');
http.createServer(function (req, res) {
  res.writeHead(200, {'Content-Type': 'text/html'});
  /*Use our upper-case module to upper case a string:*/
  res.write(uc.upperCase("Hello World!"));
  res.end();
}).listen(8080);
```

Q.Using nodejs create a web page to read two file names from user and append contents of the first file into the second file.

Solution:

```
var fs=require('fs');
fs.appendFile('f1.txt','f2.txt',
function(err){
  if(err) throw err;
  console.log('Updated');
});

f1.txt
"Welcome to BBA(CA)
f2.txt
BBA(CA) Department
```

Q. Create an HTML form for Login and write a JavaScript to validate email ID using Regular Expression.

```
Solution:
```

```
HTML Code
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<title>JavaScript form validation - checking email</title>
kerel='stylesheet' href='form-style.css' type='text/css' />
</head>
```

```
<body onload='document.form1.text1.focus()'>
<div class="mail">
<h2>Input an email and Submit</h2>
<form name="form1" action="#">
ul>
<input type='text' name='text1'/>
 
<input type="submit" name="submit" value="Submit"</pre>
onclick="ValidateEmail(document.form1.text1)"/>
 
</form>
</div>
<script src="email-validation.js"></script>
</body>
</html>
Javascript Code
function ValidateEmail(inputText)
var mailformat = /^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/;
if(inputText.value.match(mailformat))
alert("Valid email address!");
document.form1.text1.focus();
return true;
}
else
alert("You have entered an invalid email address!");
document.form1.text1.focus();
return false:
}
}
CSS Code
li {list-style-type: none;
font-size: 16pt;
}
.mail {
margin: auto;
padding-top: 10px;
padding-bottom: 10px;
width: 400px;
background: #D8F1F8;
```

```
border: 1px soild silver;
}
.mail h2 {
  margin-left: 38px;
}
input {
  font-size: 20pt;
}
input:focus, textarea:focus{
  background-color: lightyellow;
}
input submit {
  font-size: 12pt;
}
.rq {
  color: #FF0000;
  font-size: 10pt;
}
```

Q. Create a Node.js file that opens the requested file and returns the content to the client. If anything goes wrong, throw a 404 error. Solution:

```
var http = require('http');
var url = require('url');
var fs = require('fs');
http.createServer(function (req, res) {
  var q = url.parse(req.url, true);
  var filename = "." + q.pathname;
  fs.readFile(filename, function(err, data) {
    if (err) {
      res.writeHead(404, {'Content-Type': 'text/html'});
      return res.end("404 Not Found");
    }
}
```

```
res.writeHead(200, {'Content-Type': 'text/html'});
res.write(data);
return res.end();
});
}).listen(8080);
```

Initiate demo_server.js file:

C:\Users\Your Name>node demo_server.js

Q.Create an HTML form that contains the Employee Registration details and write a JavaScript to validate DOB, Joining Date, and Salary. Solution:

employee.html

```
<!DOCTYPE html>
<html lang="en"><head>
<meta charset="utf-8">
<title>JavaScript Form Validation using a sample Employee registration form</title>
<meta name="keywords" content="example, JavaScript Form Validation, Sample registratio</pre>
n form" />
<meta name="description" content="This document is an example of JavaScript Form Valid</pre>
ation using a sample registration form. "/>
k rel='stylesheet' href='employee.css' type='text/css' />
<script src="employee.js">
</script>
</head>
<body onload="document.registration.userid.focus();"bgcolor="orange">
<h1>Employee Registration Form</h1>
<form name='registration' onSubmit="return formValidation();">
ul>
<label for="first">First Name:</label>
<input type="text" name="first" size="50" />
<label for="last">Last Name:</label>
<input type="text" name="last" size="50" />
```

```
<label for="empid">Employee id:</label>
<input type="text"name="empid" size="50"/>
<label for="birth">Birth of date:</label>
<input type="date" id="birth" name="birth">
<label for="address">Address:</label>
<input type="text" name="address" size="50" />
<label for="country">Country:</label>
<select name="country">
<option selected="" value="Default">(Please select a country)
<option value="AF">Australia
<option value="AL">Canada</option>
<option value="DZ">India</option>
<option value="AS">Russia</option>
<option value="AD">USA</option>
</select>
<label for="no">Contact no:</label>
<input type="number" id="" name="no">
<label for="jdate">Date of joining:</label>
<input type="date" id="" name="jdate">
<label for="email">Email:</label>
<input type="text" name="email" size="50" />
<label id="gender">Gender:</label>
<input type="radio" name="male" value="Male" /><span>Male</span>
<input type="radio" name="female" value="Female" /><span>Female</span>
<label for="salary">salary:</label>
<input type="number" id="salary" name="salary">
<input type="submit" name="submit" value="Submit" />
</form>
</body>
</html>
employee.js
function formValidation()
var first=document.registration.first;
var last=document.registration.last;
var empid=document.registration.empid;
var birth=document.registration.birth;
var uadd =document.registration.address;
var ucountry =document.registration.country;
var no=document.registration.no;
```

```
var jdate=document.registration.jdate;
var uemail = document.registration.email;
var umgen = document.registration.umgen;
var ufgen = document.registration.ufgen;
var salary =document.registration.salary;
if(allLetter(first))
if(allLetter(last))
if(alphanumeric(empid))
if(allb(birth))
if(alphanumeric(uadd))
if(countryselect(ucountry))
if(allnumeric(no))
if(allnumeric(jdate))
if(ValidateEmail(uemail))
if(validgendor(umgen,ufgen))
if(allnumeric(salary))
}}}}}}}
return false;
function allLetter(first)
var letters = /^[A-Za-z]+$/;
if(first.value.match(letters))
alert('employee name submitted');
return true;
else
alert('employee name must have alphabet characters only');
first.focus();
return false;
```

```
function allLetter(last)
var letters = /^[A-Za-z]+$/;
if(last.value.match(letters))
  alert("employee name submitted");
return true;
else
alert('employee name must have alphabet characters only');
last.focus();
return false;
function alphanumeric(empid)
var letters = /^[0-9a-zA-Z]+$/;
if(empid.value.match(letters))
  alert("employee id submitted");
return true;
else
alert('employee id must have alphanumeric characters only');
uadd.focus();
return false;
function allb(birth)
var birth_len = birth.value.length;
if (birth_len == 0)
alert("birth date should not be empty");
birth.focus();
return false;
alert("birth of date submitted");
return true;
function alphanumeric(uadd)
var letters = /^[0-9a-zA-Z]+$/;
```

```
if(uadd.value.match(letters))
  alert("address submitted");
return true;
else
alert('address must have alphanumeric characters only');
uadd.focus();
return false;
function countryselect(ucountry)
if(ucountry.value == "Default")
alert('Select your country from the list');
ucountry.focus();
return false;
else
  alert("country submitted");
return true;
function allnumeric(no)
var number = /^[0-9] + $/;
if(no.value.match(number))
    alert("Contact Number submitted");
  return true;
  }
  else
  alert('Contact no must have numeric numbers only');
  no.focus();
  return false;
function allnumeric(jdate)
var jdate_len = jdate.value.length;
if (jdate_len == 0)
```

```
alert("date of joining should not be empty");
birthday.focus();
return false;
alert("date of joining submitted");
return true;
function ValidateEmail(uemail)
if(uemail.value.match(mailformat))
 alert("email address is submitted");
return true;
else
alert("You have entered an invalid email address!");
uemail.focus();
return false;
function validgender (umgen, ufgen)
{
x=0;
if(umgen.checked)
{
X++;
} if(ufgen.checked)
X++;
if(x==0)
alert('Select Male/Female');
umgen.focus();
return false;
else
window.location.reload()
return true;
```

```
function allnumeric(salary)
var sal = /^[0-9] + $/;
if(salary.value.match(sal))
alert("salary submitted");
return true;
else
alert('salry is not submitted');
salary.focus();
return false;
employee.css
h1 {
  margin-left: 70px;
  form li {
  list-style: none;
  margin-bottom: 5px;
  form ul li label{
  float: left;
  clear: left;
  width: 100px;
  text-align: right;
  margin-right: 10px;
  font-family: Verdana, Arial, Helvetica, sans-serif;
  font-size:14px;
  }
  form ul li input, select, span {
  float: left;
  margin-bottom: 10px;
  }
  form textarea {
  float: left;
  width: 350px;
```

```
height: 150px;
}

[type="submit"] {
  clear: left;
  margin: 20px 0 0 230px;
  font-size:18px
}

p {
  margin-left: 70px;
  font-weight: bold;
}
```