

**DATE : 28/04/2021**

## **ASSIGNMENT 8**

### **UCS 1601 – INTERNET PROGRAMMING**

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#### **Exercise 8: Programs using Node.js**

##### ***SPECIFICATIONS:***

a. Write a Node.js program that reads all the greetings from the file greetings.txt, asks the user "What is your name?", then prints a random greeting followed by the given name. Make sure to check for the case where the file doesn't exist! For example, if the greeting is "Hey", then the program will print "Hey, Joe" to the console, then pick some other greeting and do the same until finished. Use Non-blocking I/O.

b. Write a Node.js program that reads all the greetings as before. When all the greetings are loaded, it creates a server listening on port number 8080. On request, it checks for whether there is a name value in the query string. If there isn't, the value of query.name will be undefined. In other words, if you access <http://localhost:8080/?name=Mike>, then your browser should just display something like "Hello, Mike" when the page loads.

### **greetings.txt**

Hello

Hey

Hi

What's up

Welcome

### ***CODE:***

#### ***greet.js***

```
var fs = require("fs");
var readline = require("readline");

var rl = readline.createInterface({
  input: process.stdin,
  output: process.stdout
});

if(!fs.existsSync("greetings.txt")) {
  console.log("File not found");
  rl.close();
}

else {
  var greetingsFile = fs.readFileSync("greetings.txt");
  var greetings_string = greetingsFile.toString();
  var greetings = greetings_string.split("\n");

  rl.question("What is your name? ", function(name) {
    for(var i = 0; i < 1; i++) {
      var n = Math.floor(Math.random() * greetings.length);
      console.log(name+', '+greetings[n]);
    }
    rl.close();
  });
}
```

## ***greetser.js***

```
var http = require("http");
var fs = require("fs");
var url = require("url");

var greetings;
fs.readFile("greetings.txt", function(err, body) {
  if (err === null) {
    greetings = body.toString().split("\n");

    var server = http.createServer(function(req, res) {
      res.writeHead(200);
      var query = url.parse(req.url, true).query;
      var name = query.name;
      var greeting = greetings[Math.floor(Math.random() * greetings.length)];
      if (name) {
        res.end(greeting + ", " + name);
      } else {
        res.end(greeting);
      }
    });
    server.listen(8080);
  } else {
    console.log(err);
  }
});
```

## ***greetings.txt***

Hello

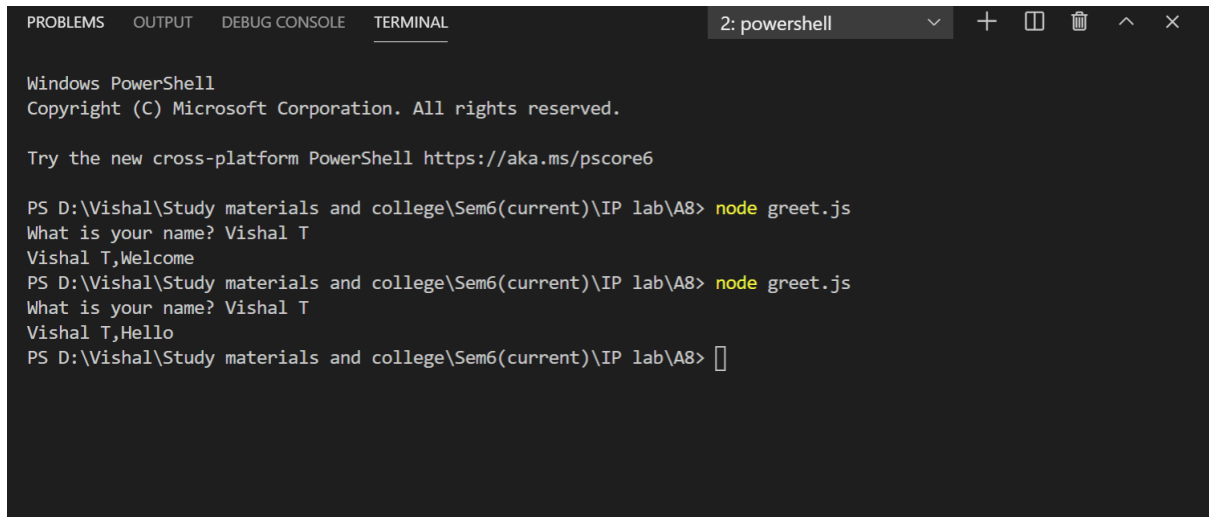
Hey

Hi

What's up

Welcome

## OUTPUT:



```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  2: powershell  +  [ ]  [ ]  ^  x

Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS D:\Vishal\Study materials and college\Sem6(current)\IP lab\A8> node greet.js
What is your name? Vishal T
Vishal T,Welcome
PS D:\Vishal\Study materials and college\Sem6(current)\IP lab\A8> node greet.js
What is your name? Vishal T
Vishal T,Hello
PS D:\Vishal\Study materials and college\Sem6(current)\IP lab\A8> [ ]
```



```
localhost:8080/?name=Vishal_T  +
localhost:8080/?name=Vishal_T
Hey
, Vishal_T
```

**Learning outcome:**

- Learned to implement javascript program in nodejs environment.
- Learned to read a file using fs module.
- Learned to create a server in nodejs environment.