GANPAT UNIVERSITY
U.V. PATEL COLLEGE OF ENGINEERING
B.Tech 5th Semester CE

2CEIT5PE4: Software Packages

Practical – 3

Aim :- Core, user defined and third party module.

1. **Using HTTP and other required core modules, create HTTP server and display the following message to console and on the webpage for different URL entered by the user.**
   (1) If user enter "/ " then display "Home Page"
   (2) If the user enters "/exam" then display the following table.

Date	Code	Subject
28/08/2023	2CEIT501	Computer Architecture and Organization
30/08/2023	2CEIT503	Computer Network
01/09/2023	2CEIT5PE4	Software Packages

   (3) If user enter "/exam/semester_end" then redirect user to timetable of "Regular exam"

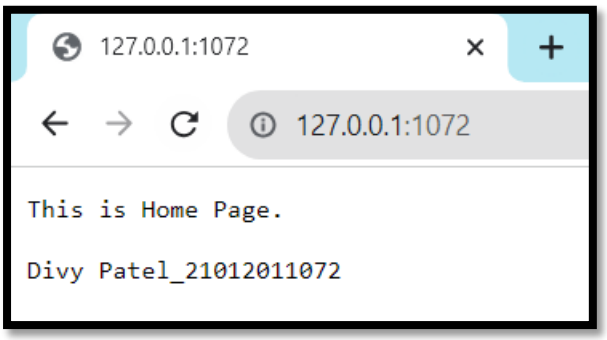
   Note: You can use either switch case or else if statement.

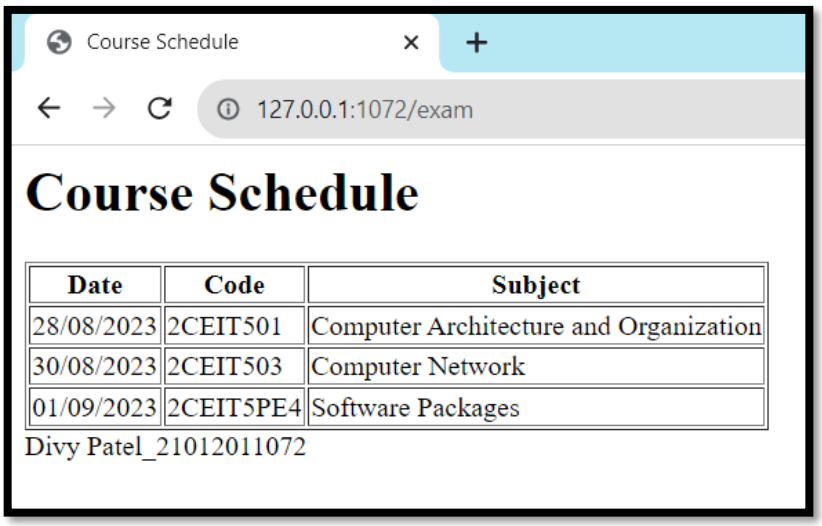
Code :-

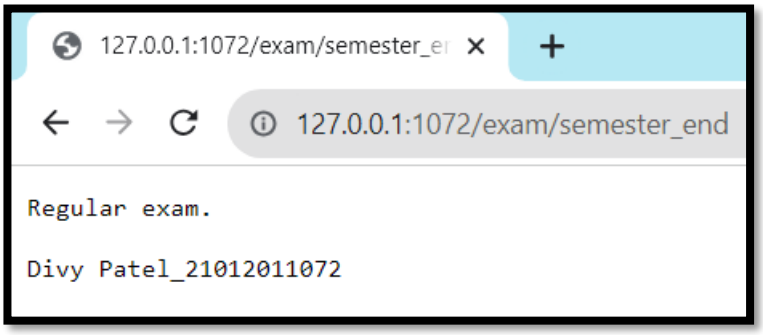
```
var http = require('http');
http.createServer(function(req,res){
   if(req.url=='/'){
      res.write('This is Home Page.');
   }
   else if(req.url=='/exam'){
```

```
    var code = '<html> <head> <title>Course Schedule</title></head><body><h1>Course
Schedule</h1><table border="1"> <tr> <th>Date</th><th>Code</th><th>Subject</th></tr>
<tr><td>28/08/2023</td><td>2CEIT501</td><td>Computer Architecture and
Organization</td></tr> <tr><td>30/08/2023</td><td>2CEIT503</td><td>Computer
Network</td></tr> <tr><td>01/09/2023</td><td>2CEIT5PE4</td><td>Software
Packages</td></tr> </table> </body> </html>'
    res.write(code);
  }
  else if(req.url=='/exam/semester_end'){
    res.write('Regular exam.');
  }
  res.end("\n\nDivy Patel_21012011072");
}).listen(1072);
console.log("Connected Successfully.");
```

Output :-







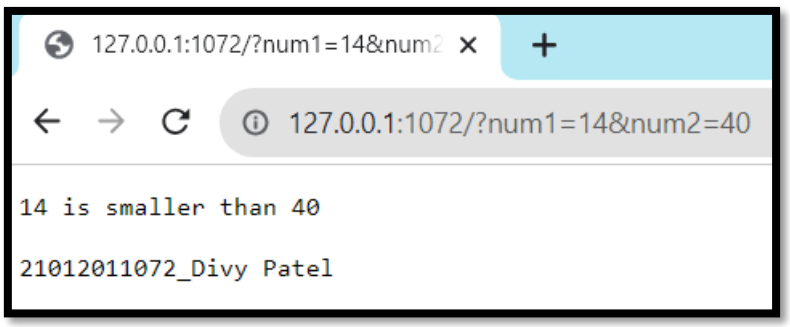
2. **In a given query string of URL, give two parameters num1 and num2 and assign integers values to them and then find the smallest number among those two numbers.**
   [URL:localhost:8080/?num1=14&num2=40]

Code :-

```
var http = require('http');
var url = require('url');
var server = http.createServer(function (req,res) {
   const q = url.parse(req.url, true).query;
   const num1 = q.num1
   const num2 = q.num2

   if(num1>num2){
      res.write(`${num1} is greater than ${num2}.`);
      res.write('\n\n21012011072_Divy Patel');
      res.end();
   }
   else if(num1 == num2){
      res.write(`${num1} and ${num2} are same.`);
      res.write('\n\n21012011072_Divy Patel');
      res.end();
   }
   else{
      res.write(`${num1} is smaller than ${num2}`);
      res.write('\n\n21012011072_Divy Patel');
      res.end();
   }
});
server.listen(1072);
```

Output :-



3. **Create a local module named as 'todoList' which contains 3 functions for adding, removing and listing tasks. Export it in another file main.js and display their result.**

Code(P3_3.js) :-

```
const tasks = [];
exports.addTask = function(task) {
   tasks.push(task);
}
exports.removeTask = function() {
   tasks.pop();
}
exports.listTasks = function() {
   return tasks;
}
```

Code(P3_3-1.js) :-

```
const todoList = require('./P3_3.js');
console.log('21012011072_Divy Patel');
todoList.addTask('To do homework');
todoList.addTask('Go for playing cricket');
todoList.addTask('Go for sleep');

const tasks = todoList.listTasks();

console.log(`All tasks : ${tasks}`);

todoList.removeTask();

console.log('---------------After removing tasks---------------');
console.log(`Current tasks : ${tasks}`);
```

Output :-

```
[Running] node "d:\College\5th Sem\Software Packages (SP)\Pract
21012011072_Divy Patel
All tasks : To do homework,Go for playing cricket,Go for sleep
---------------After removing tasks---------------
Current tasks : To do homework,Go for playing cricket
```