KESHAV MEMORIAL INSTITUTE OF TECHNOLOGY

(AN AUTONOMOUS INSTITUTE)

Accredited by NBA & NAAC, Approved by AICTE, Affiliated to JNTUH,
Narayanguda, Hyderabad – 500029

Department of Computer Science & Engineering(AI&ML)

Course Outcomes and CO-PO-PSO Mapping

Course Outcomes:

After learning the contents of this course, the student is able to

CO1	Apply asynchronous programming techniques using java script.
CO2	Apply HTML and JavaScript effectively to create an interactive and responsive website.
CO3	Develop a simple client server model using NodeJS and Express JS.
CO4	Analyze and Implement routing methodologies using Express JS.
CO5	Design and create a NoSQL (Mongo)database and then integrate it with the front end using Express JS, this, by better understanding client-server communication

CO-PO-PSO MAPPING:

		PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12
Web Technologies Lab	CO1	2	2	2	3								
	CO2	2	2	3	3								
	CO3	2	3	3	3								
	CO4	2	2	3	2								
	CO5	2	2	3	3								

Software Requirements

Software Required:

1. **visual studio code** (Editor for writing code)

2. **nodejs**(Node.js is an open source server environment, to run JavaScript on the server)

3. **mongodb** (MongoDB is an open source NoSQL database management program.)

Installation process:

1. Visual studio code https://code.visualstudio.com/download
   a. Download software according to your system/laptop specifications.
   b. Follow the instructions accordingly and go on to install software.

2. Node.js https://nodejs.org/en/download/
   a. Download software according to your system/laptop specifications.
   b. Follow the instructions accordingly and go on to install software.

3. MongoDB https://www.mongodb.com/try/download/community
   a. Download community software according to your system/laptop specifications.
   b. Follow the instructions accordingly and go on to install software.

EXPERIMENT 1

1.a) Write a JavaScript program which accepts a string as input and swap the case of each character. For example if you input 'The Quick Brown Fox' the output should be 'tHEqUICKbROWNfOX'. – "one.js"

```
const readline = require('readline');
var RL = readline.createInterface(process.stdin, process.stdout);
RL.question('Please Enter Text:  ', (name)=>{
  let x=name;
  let y="";
for(let i=0;i<x.length;i++)
{
if (x.charAt(i) >='A' && x.charAt(i) <= 'Z')
y=y+x.charAt(i).toLowerCase();
else if(x.charAt(i) >='a' && x.charAt(i) <= 'z')
y=y+x.charAt(i).toUpperCase();
}

  console.log(`Output is is ${y}`);

});
```

EXPECTED OUTPUT:

b) **. Write a JavaScript program to find the most frequent item of an array. – “two.js”**

```
var arr1=[3, 'a', 'a', 'a', 2, 3, 'a', 3, 'a', 2, 4, 9, 3];
var mf = 1;
var m = 0;
var item;
for (var i=0; i<arr1.length-1; i++)
{
        for (var j=i; j<arr1.length; j++)
        {
                if (arr1[i] == arr1[j])
                 m++;
                if (mf<m)
                {
                  mf=m;
                  item = arr1[i];
                }
        }
        m=0;
}
console.log(item+" ( " +mf +" times ) ") ;
```

EXPECTED OUTPUT

c). Write a JavaScript program to remove duplicate items from an array – ‘three.js’

```
function removeDuplicates(num) {
        len=num.length;
        uniqueChars=[];

        num.forEach((c) => {
            if (!uniqueChars.includes(c)) {
                uniqueChars.push(c);
            }
        });
    return uniqueChars;
  }
  let Mynum = [1, 2, 2, 4, 5, 4, 7, 8, 7, 3, 6];
  result = removeDuplicates(Mynum);
  console.log("Original List:    "+Mynum);
  console.log("Unique List:     "+result);
```

EXPECTED OUTPUT:

d) Write a JavaScript program to perform a binary search. – “four.js”

```
let iterativeFunction = function (arr, x) {
   let start=0, end=arr.length-1;
   while (start<=end){
      let mid=Math.floor((start + end)/2);
      if (arr[mid]===x) return true;
      else if (arr[mid] < x)
          start = mid + 1;
      else
          end = mid - 1;
   }

   return false;
}


let arr = [1, 3, 5, 7, 8, 9];
let x = 5;
console.log(iterativeFunction(arr, x) )   ;
```

EXPECTED OUTPUT:

e) **Write a JavaScript program to list the properties of a JavaScript object – “five.js”**

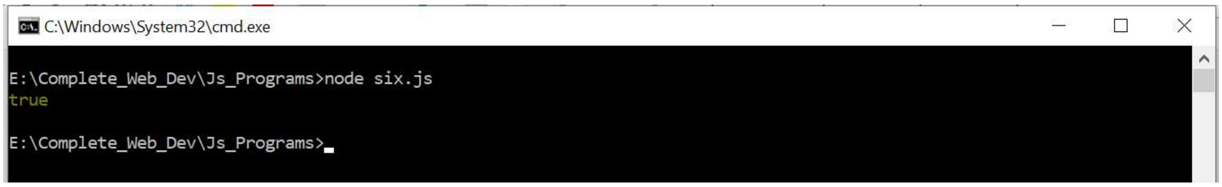
```
let object = {
   name: 'Jack',
   age: 25,
   college: 'KMIT',
   year: 3,
   sem: 1
 };
let properties = Object.keys(object)
console.log(properties);
```

EXPECTED OUTPUT:

f) Write a JavaScript function to check whether an object contains given property. – “six.js”

***1. hasOwnProperty()* method**

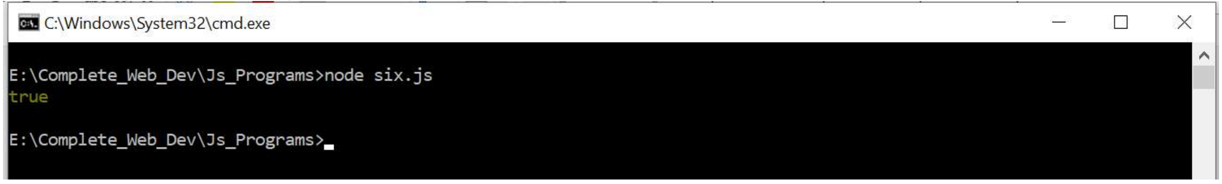
```
let object = {
   name: 'Jack',
   age: 25,
   college: 'KMIT',
   year: 3,
   sem: 1
 };
console.log(object.hasOwnProperty('name'));
```



```
E:\Complete_Web_Dev\Js_Programs>node six.js
true

E:\Complete_Web_Dev\Js_Programs>
```

2. in operator Method:

```
let object = {
   name: 'Jack',
   age: 25,
   college: 'KMIT',    year: 3,    sem: 1
 };
console.log(‘name’ in object);
```



```
E:\Complete_Web_Dev\Js_Programs>node six.js
true

E:\Complete_Web_Dev\Js_Programs>
```

3. Comparing with undefined Method:

```
let object = {
   name: 'Jack',
   age: 25,
   college: 'KMIT',    year: 3,    sem: 1
 };
console.log(object.name);
console.log(object.fee);
```

Expected output: here Name property is available so programs gives you output as ‘Jack’ but fee property is not available so it is giving output as undefined.

g) Write a JavaScript program to sort a list of elements using Quick sort. –“seven.js”

```
function quick_Sort(origArray) {
    if (origArray.length <= 1) {
            return origArray;
    } else {

            var left = [];
            var right = [];
            var newArray = [];
            var pivot = origArray.pop();
            var length = origArray.length;

            for (var i = 0; i < length; i++) {
                    if (origArray[i] <= pivot) {
                            left.push(origArray[i]);
                    } else {
                            right.push(origArray[i]);
                    }
            }

            return newArray.concat(quick_Sort(left), pivot, quick_Sort(right));
    }
}

var myArray = [3, 0, 2, 5, -1, 4, 1 ];

console.log("Original array: " + myArray);
var sortedArray = quick_Sort(myArray);
console.log("Sorted array: " + sortedArray);
```

Expected Output:

h) Write a JavaScript program to implement Bubble Sort. –“eight.js”

```
function swap(arr, first_Index, second_Index){
   var temp = arr[first_Index];
   arr[first_Index] = arr[second_Index];
   arr[second_Index] = temp;
}

function bubble_Sort(arr){

   var len = arr.length,
      i, j, stop;

   for (i=0; i < len; i++){
      for (j=0, stop=len-i; j < stop; j++){
         if (arr[j] > arr[j+1]){
            swap(arr, j, j+1);
         }
      }
   }

   return arr;
}
myArray=[3, 0, 2, 5, -1, 4, 1];
console.log("Original array: " + myArray);
var sortedArray = bubble_Sort(myArray);
console.log("Sorted array: " + sortedArray);
```

Expected Output:

i) Write a JS program to read from a JSON object and display the data in a table (HTML page)

s1.json

```
{ "student":[
  {"name": "Bhavana", "age": 20,  "college": "KMIT", "year": 3, "sem": 1 },
  { "name": "Ram", "age": 21, "college": "JNTU", "year": 4,"sem": 2 },
  { "name": "John", "age": 26, "college": "KMEC", "year": 1,"sem": 1 },
  { "name": "Reena", "age": 19, "college": "NGIT", "year": 3,"sem": 1 }
]
}
```

nineIX.html

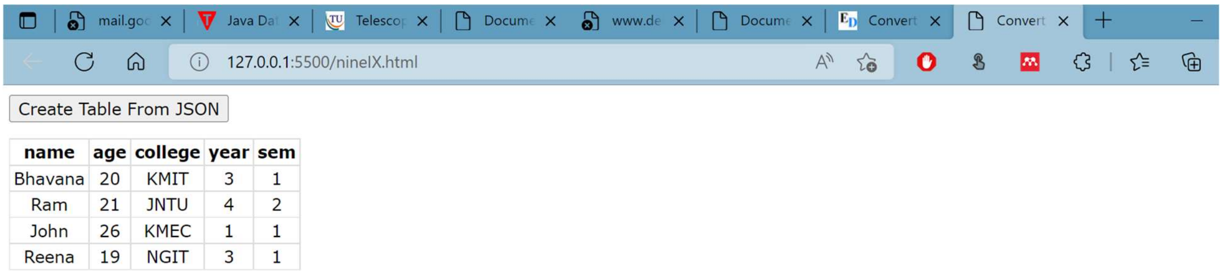
```
<!DOCTYPE html>
<html>
<head>
   <title>Convert JSON Data to HTML Table</title>
   <style>
      th, td, p, input {
         font:14px Verdana;
      }
      table, th, td
      {
         border: solid 2px #DDD;
         border-collapse: collapse;
         padding: 2px 3px;
         text-align: center;
      }
      th {
         font-weight:bold;
      }
   </style>
</head>
```

```
<body>
   <input type="button" onclick="CreateTableFromJSON()" value="Create Table From JSON"
/>
   <p id="showData"></p>
</body>

<script>
   function CreateTableFromJSON() {
      fetch("s1.json")
      .then (response => response.json())
      .then(data => {
      // EXTRACT VALUE FOR HTML HEADER.
      // ('Name', 'Age', 'College', 'Year',Sem)
      var col = [];
      for (var i = 0; i < data.student.length; i++) {
         for (var key in data.student[i]) {
            if (col.indexOf(key) === -1) {
               col.push(key);
            }
         }
      }
         console.log(col);
      // CREATE DYNAMIC TABLE.
      var table = document.createElement("table");

      // CREATE HTML TABLE HEADER ROW USING THE
EXTRACTED HEADERS ABOVE.
```

```
    var tr = table.insertRow(-1);                   // TABLE ROW.

    for (var i = 0; i < col.length; i++) {
      var th = document.createElement("th");      // TABLE
HEADER.
      th.innerHTML = col[i];
      tr.appendChild(th);
    }

    // ADD JSON DATA TO THE TABLE AS ROWS.
    for (var i = 0; i < data.student.length; i++) {

      tr = table.insertRow(-1);

      for (var j = 0; j < col.length; j++) {
        var tabCell = tr.insertCell(-1);
        tabCell.innerHTML = data.student[i][col[j]];
      }
    }

    // FINALLY ADD THE NEWLY CREATED TABLE
WITH JSON DATA TO A CONTAINER.
    var divContainer =
document.getElementById("showData");
```

```
        divContainer.innerHTML = "";
        divContainer.appendChild(table);
    })
    }
</script>
</html>
```

EXPECTED OUTPUT:



name	age	college	year	sem
Bhavana	20	KMIT	3	1
Ram	21	JNTU	4	2
John	26	KMEC	1	1
Reena	19	NGIT	3	1

j) **Create a JS application that accepts the student's roll number, name, and marks and, when the form has been submitted, displays the student's name, roll number, and marks in a tabular format along with their GPA (like a marks sheet) – "ten.html"**

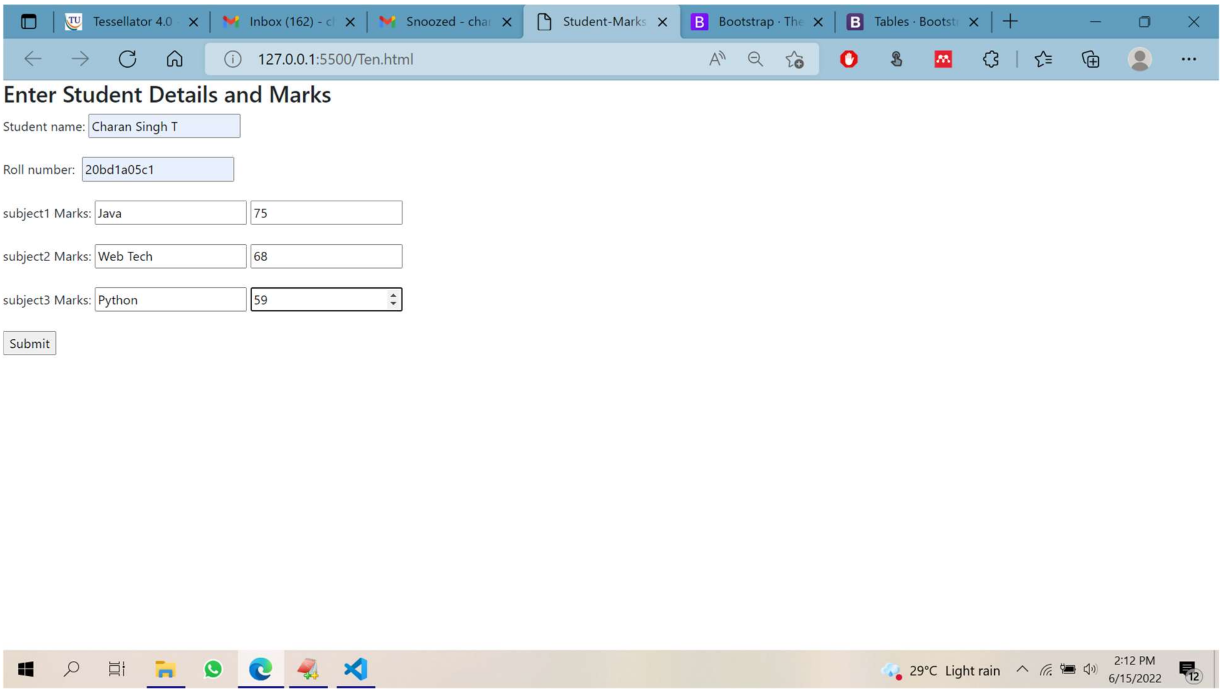
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Student-Marks-Sheet</title>
  <!-- CSS only -->
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0-beta1/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
0evHe/X+R7YkIZDRvuzKMRqM+OrBnVFBL6DOitfPri4tjfHxaWutUpFmBp4vmVor"
crossorigin="anonymous">
```

```
    <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.4.1/js/bootstrap.min.js"></script>

    <style>
      .sdetails{

      }
    </style>
</head>
<body>
  <div id="mydata">

  </div>

  <div id="myformdiv">
    <h3> Enter Student Details and Marks</h3>
    <form id="myForm" method="post" >
        <label>Student name:</label>
         <input type="text" id="sname" ><br> <br>
         <label>Roll number:&nbsp; </label>
         <input type="text" id="rollno"><br><br>
         <label>subject1 Marks:</label>
         <input type="text" id="sub1name" placeholder="sub1">
         <input type="number" id="marks1"><br><br>
         <label>subject2 Marks:</label>
         <input type="text" id="sub2name" placeholder="sub2" >
         <input type="number" id="marks2"><br><br>
         <label>subject3 Marks:</label>
         <input type="text" id="sub3name" placeholder="sub3">
         <input type="number" id="marks3"><br><br>
        <input type="button" onclick="myFunction()" value="Submit">
      </form>
    </div>
```

```
<script>
  function myFunction() {
    document.getElementById('myformdiv').style.display='none';
    let myInfo = `
    <div class='sdetails'>
    <h3> Student Details and Marks</h3>
     <table class=table-bordered table-primary>
      <tr>
        <td class="bg-primary"> Name</td> <td>${
document.getElementById('sname').value}</td>
        </tr>
        <tr> <td class="bg-primary"> Hallicket Number:  </td> <td>${
document.getElementById('rollno').value}</td>
        </tr>
        <tr>
          <td > ${ document.getElementById('sub1name').value} Marks </td><td>${
document.getElementById('marks1').value}.</td>
        </tr>
        <tr> <td>  ${ document.getElementById('sub2name').value} Marks </td><td> ${
document.getElementById('marks2').value}</td>
        </tr>
        <tr> <td>  ${ document.getElementById('sub3name').value} Marks </td><td> ${
document.getElementById('marks3').value}</td>
        </tr>
        </tr>
      </table>
      </div>


    `;
    document.getElementById('mydata').innerHTML = myInfo;


  }
  </script>
```

```
</body>
</html>
```

EXPECTED OUTPUT



Enter Student Details and Marks

Student name: Charan Singh T

Roll number: 20bd1a05c1

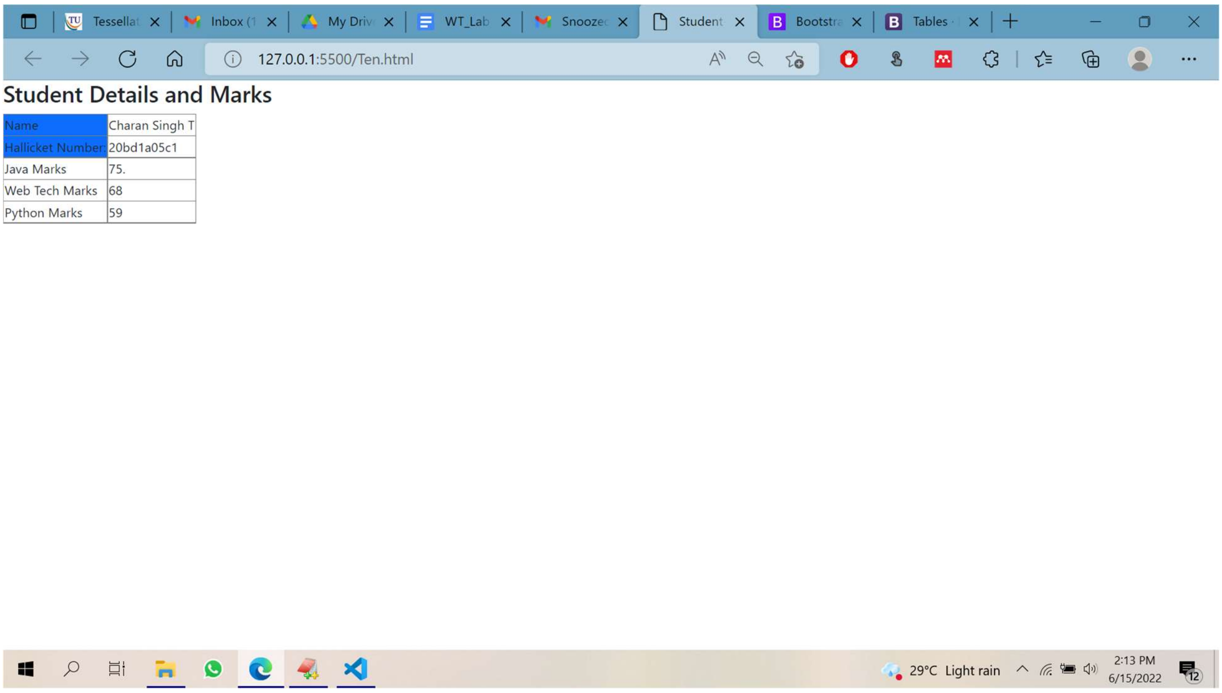
subject1 Marks: Java 75

subject2 Marks: Web Tech 68

subject3 Marks: Python 59

Submit

on submit



Student Details and Marks

Name	Charan Singh T
Hallicket Number:	20bd1a05c1
Java Marks	75.
Web Tech Marks	68
Python Marks	59

EXPERIMENT 2

2) Write JS code in an HTML page such that based on location selected by the user an AJAX request is made and weather details for that location are fetched and displayed. – “index.html”

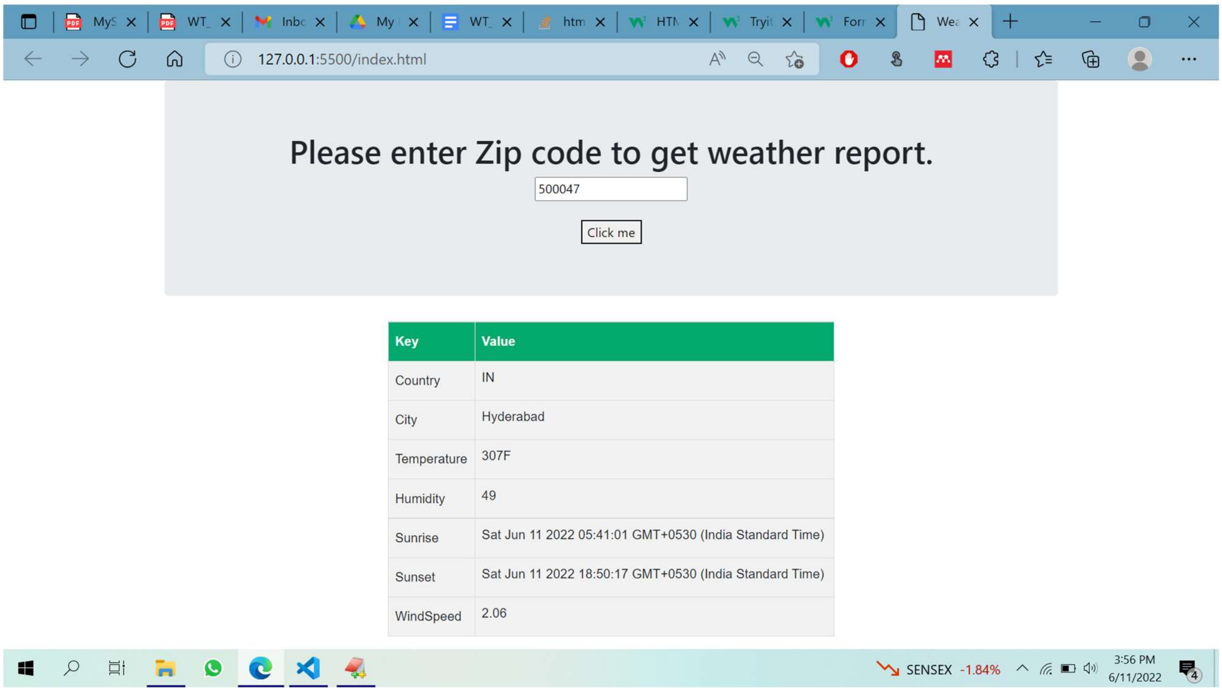
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
     <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css">
       <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
       <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
       <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.0/umd/popper.min.js"></script>
       <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.4.1/js/bootstrap.min.js"></script>
     <link rel="stylesheet" href="mystyle.css">
  <title>Weather App</title>
  <style>
     #weather {
  font-family: Arial, Helvetica, sans-serif;
  border-collapse: collapse;
  width: 50%;
  margin-left:25%;
  margin-right:15%;
 }

 #weather td, #weather th {
  border: 1px solid #ddd;
  padding: 8px;
 }
 #weather tr:nth-child(even){background-color: #f2f2f2;}

 #weather tr:hover {background-color: #ddd;}

 #weather th {
  padding-top: 12px;
  padding-bottom: 12px;
  text-align: left;
  background-color: #04AA6D;
  color: white;
 }
  </style>
  <script>
        function getWeather(){
        //doucment.getElementBy

        let request = new XMLHttpRequest();
        let zip=document.getElementById('tb1').value;


request.open('GET','https://api.openweathermap.org/data/2.5/weather?q='+zip+'&appid=93f26e
3c57081a6210de53b8dcfdfea4',true);



      request.onload = function() {
  if( request.status >=200 && request.status < 400){
      let data = JSON.parse(request.responseText);
      console.log(data);
      var icon = "https://openweathermap.org/img/w/"+data.weather[0].icon+".png"
            document.getElementById('temp').innerHTML = data.main.temp+ 'F';
            document.getElementById('country').innerHTML=data.sys.country;
            document.getElementById('city').innerHTML=data.name;
            let tim= new Date(data.sys.sunrise * 1000);
```

```
               document.getElementById('sunrise').innerHTML=tim;
               let tim1= new Date(data.sys.sunset * 1000);
               document.getElementById('sunset').innerHTML=tim1;
               document.getElementById('windspeed').innerHTML=data.wind.speed;
               document.getElementById('humid').innerHTML=data.main.humidity;


             }
    else{
        console.log('failed connecting')
    }
}

request.onerror = function() {
    console.log(" Error ")
}

request.send();

        }

    </script>
</head>
<body>
    <div class="container">
    <div class="jumbotron text-center">
        <h1>Please enter Zip code to get  weather report.</h1>
        <input type="text" placeholder="enter zip code"id="tb1"><br><br>
    <button type="submit" vlaue="Click for weather" onclick="getWeather()">Click
me</button>
      </div>



   <table class="table-bordered table-striped" id="weather" >
```

```
<thead>
    <tr>
      <th>Key</th>
      <th>Value</th>
    </tr>
  </thead>

  <tbody>
    <tr>
        <td>Country</td>
        <td><label id="country"></label></td>
    </tr>
    <tr>
        <td>City</td>
        <td ><label id="city"></label></td>
    </tr>
    <tr>
        <td>Temperature</td>
        <td ><label id="temp"></label></td>
    </tr>
    <tr>
        <td>Humidity</td>
        <td ><label id="humid"></label></td>
    </tr>
    <tr>
        <td>Sunrise</td>
        <td ><label id="sunrise"></label></td>
    </tr>
    <tr>
        <td>Sunset</td>
        <td ><label id="sunset"></label></td>
    </tr>
    <tr>
```

```
            <td>WindSpeed</td>
            <td ><label id="windspeed"></label></td>
        </tr>
        </tbody>

    </table>
</div>
</body>
</html>
```

EXPECTED OUTPUT :



127.0.0.1:5500/index.html

Please enter Zip code to get weather report.

500047

Key	Value
Country	IN
City	Hyderabad
Temperature	307F
Humidity	49
Sunrise	Sat Jun 11 2022 05:41:01 GMT+0530 (India Standard Time)
Sunset	Sat Jun 11 2022 18:50:17 GMT+0530 (India Standard Time)
WindSpeed	2.06

EXPERIMENT 3

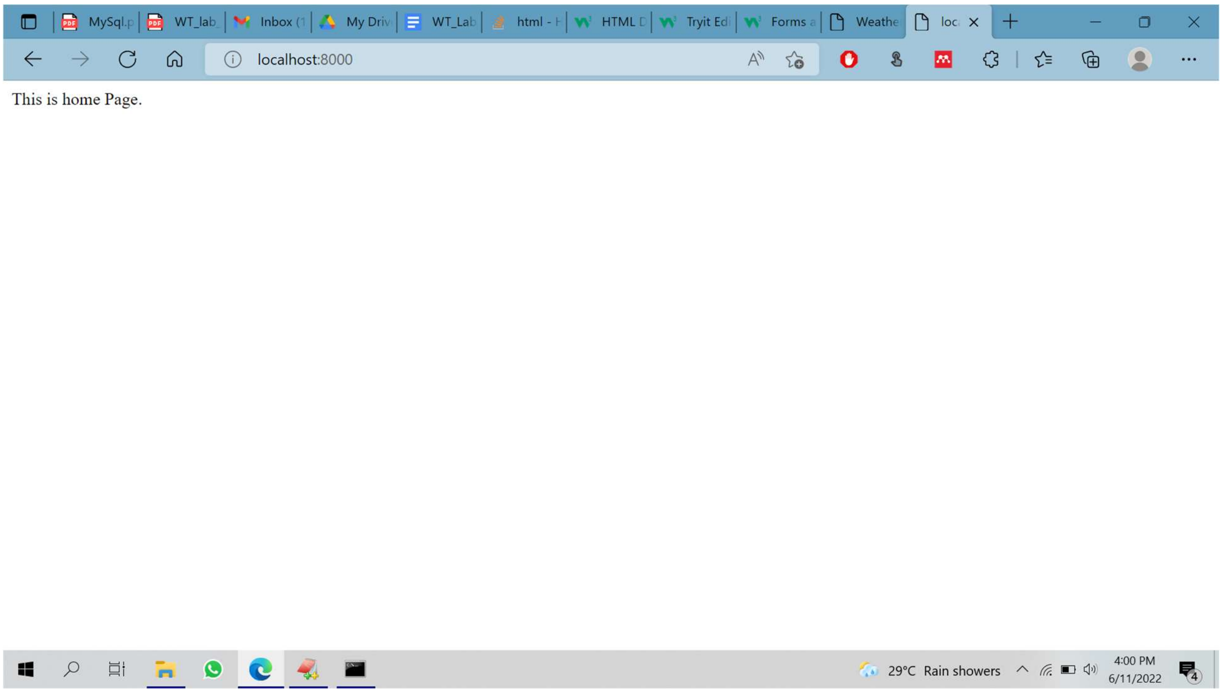
3) Write a Node JS program that accepts a port from the user and runs a node server at that port --“server.js”

```
var http = require('http');


var server = http.createServer(function (req, res) {
   if (req.url == '/') { //check the URL of the current request


      // set response header
      res.writeHead(200, { 'Content-Type': 'text/html' });
      // set response content
      res.write('<html><body><p>This is home Page.</p></body></html>');
      res.end();
   }
   else if (req.url == "/student") {
      res.writeHead(200, { 'Content-Type': 'text/html' });
      res.write('<html><body><p>This is student Page.</p></body></html>');
      res.end();
   }
   else if (req.url == "/admin") {
      res.writeHead(200, { 'Content-Type': 'text/html' });
      res.write('<html><body><p>This is admin Page.</p></body></html>');
      res.end();
   }
   else
      res.end('Invalid Request!');



});


server.listen(8000);
console.log('Node.js web server at port 8000 is running..')
```

EXPECTED OUTPUT

node server.js

Node.js web server at port 8000 is running..



This is home Page.

EXPERIMENT 4

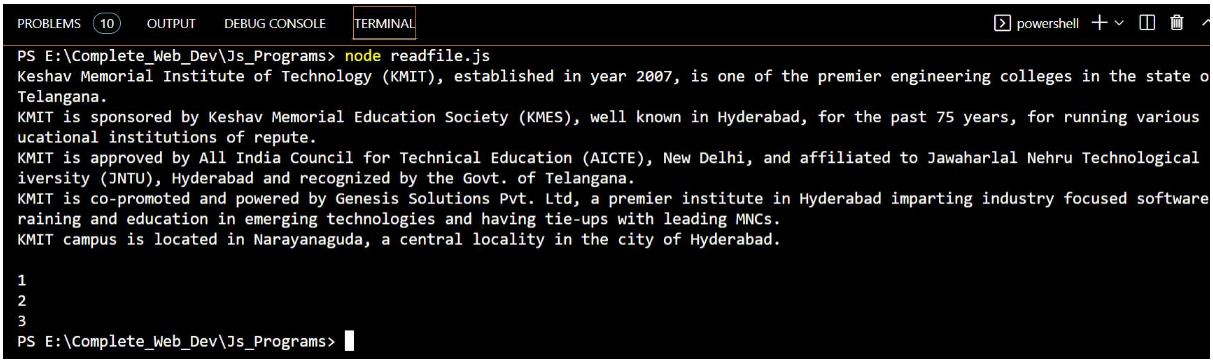
4. Write a NodeJS program to read from a file and display the content on screen – “readfile.js”

```
var fs = require('fs');
try {
  var data = fs.readFileSync('my-file.txt', 'utf8');
  console.log(data);
} catch(e) {
  console.log('Error:', e.stack);
}
```

my-file.txt

```
Keshav Memorial Institute of Technology (KMIT), established in 2007, is one of the premier
engineering colleges in the state of Telangana.

KMIT is sponsored by Keshav Memorial Education Society (KMES), well known in
Hyderabad, for the past 75 years, for running various educational institutions of repute.

KMIT is approved by All India Council for Technical Education (AICTE), New Delhi, and
affiliated to Jawaharlal Nehru Technological University (JNTU), Hyderabad and recognized by
the Govt. of Telangana.

KMIT is co-promoted and powered by Genesis Solutions Pvt. Ltd, a premier institute in
Hyderabad imparting industry focused software training and education in emerging technologies
and having tie-ups with leading MNCs.

KMIT campus is located in Narayanaguda, a central locality in the city of Hyderabad.

1

2

3
```

EXPECTED OUTPUT



```
PS E:\Complete_Web_Dev\Js_Programs> node readfile.js
Keshav Memorial Institute of Technology (KMIT), established in year 2007, is one of the premier engineering colleges in the state o
Telangana.
KMIT is sponsored by Keshav Memorial Education Society (KMES), well known in Hyderabad, for the past 75 years, for running various
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iversity (JNTU), Hyderabad and recognized by the Govt. of Telangana.
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raining and education in emerging technologies and having tie-ups with leading MNCs.
KMIT campus is located in Narayanaguda, a central locality in the city of Hyderabad.

1
2
3
PS E:\Complete_Web_Dev\Js_Programs> 
```

EXPERIMENT 5

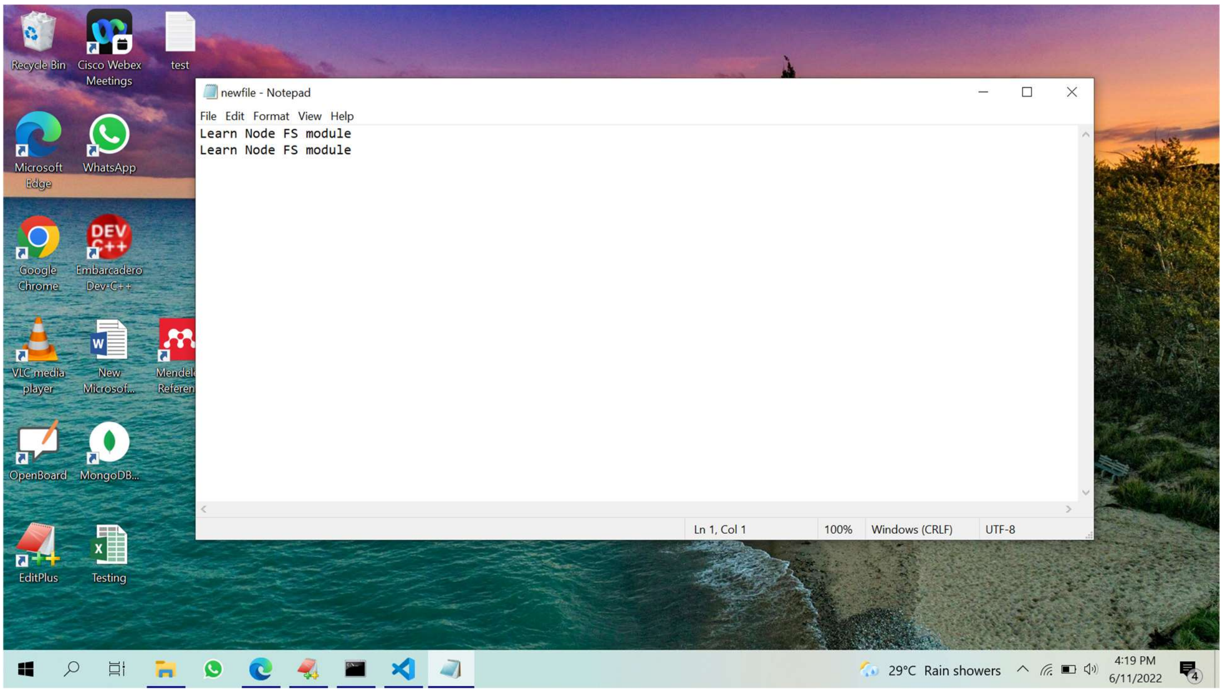
5. **Create a NodeJS programme that allows users to submit text and a file name, and if the file already exists, appends the text to the file. If not, make a fresh file and include the text in it.**

```
var fs = require('fs');

// appendFile function with filename, content and callback function
fs.appendFile('newfile.txt', `Learn Node FS module \r\n`, function (err) {
  if (err) throw err;
  console.log('File is Appended successfully.');
});
```

EXPECTED OUTPUT

File is appended successfully.

newfile.txt –

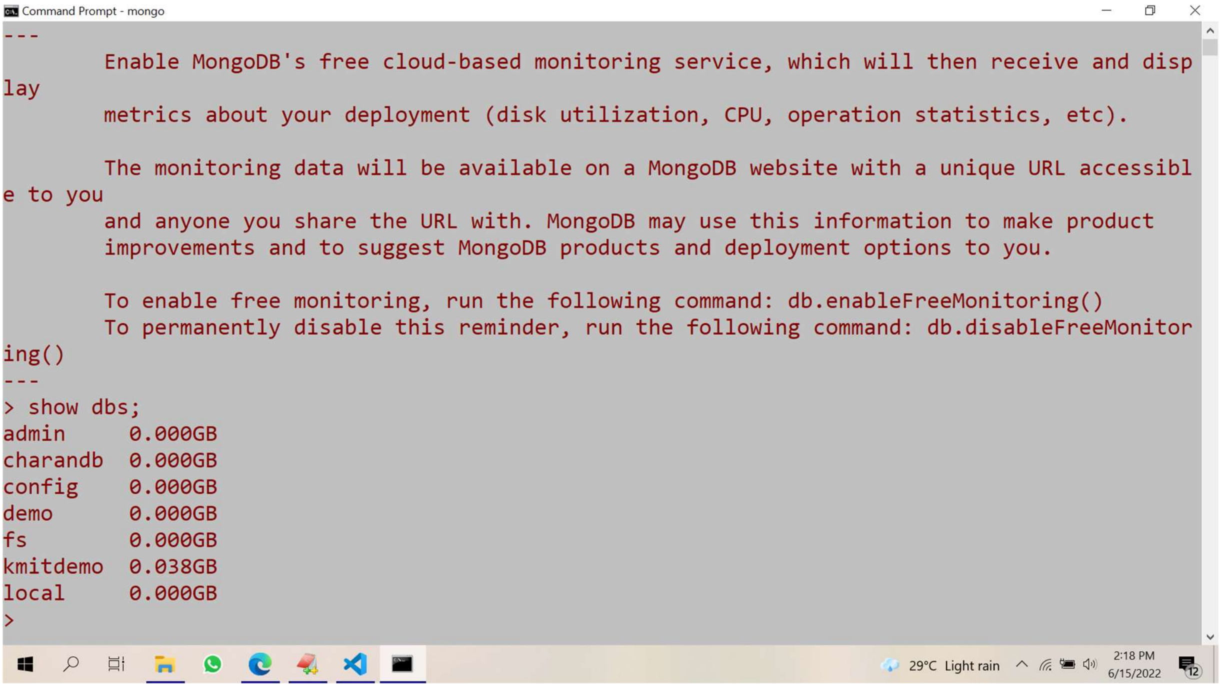


```
Learn Node FS module
Learn Node FS module
```

EXPERIMENT 6

6. Create a student database in MongoDB with all the details of students of a class

1.show dbs;



```
---
        Enable MongoDB's free cloud-based monitoring service, which will then receive and disp
lay
        metrics about your deployment (disk utilization, CPU, operation statistics, etc).

        The monitoring data will be available on a MongoDB website with a unique URL accessibl
e to you
        and anyone you share the URL with. MongoDB may use this information to make product
        improvements and to suggest MongoDB products and deployment options to you.

        To enable free monitoring, run the following command: db.enableFreeMonitoring()
        To permanently disable this reminder, run the following command: db.disableFreeMonitor
ing()
---
> show dbs;
admin      0.000GB
charandb   0.000GB
config     0.000GB
demo       0.000GB
fs         0.000GB
kmitdemo   0.038GB
local      0.000GB
>
```

2. use student;

switched to db student

insert into studentinfo collection

3. db.studentinfo.insert({name:"john",id:"20bd1a05051",course:"b.tech",branch:"cse"})

WriteResult({ "nInserted" : 1 })

4. db.studentinfo.insert({name:"reena",id:"20bd1a0502",course:"M.tech",branch:"it"})

WriteResult({ "nInserted" : 1 })

5. db.studentinfo.insert({name:"ram",id:"20bd1a0503",course:"b.tech",branch:"cse"})

WriteResult({ "nInserted" : 1 })

EXPECTED OUTPUT

view studentinfo collection:

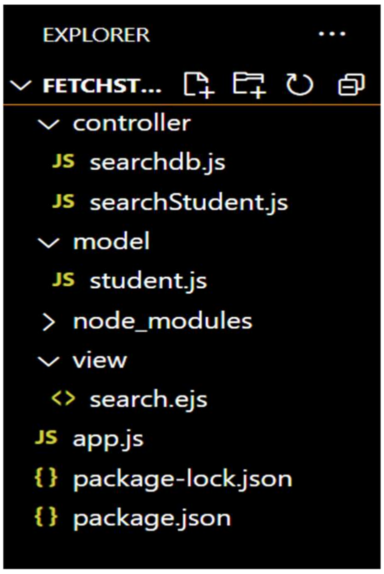
6. db.studentinfo.find({})

```
{ "_id" : ObjectId("62a99e693dbaba59a0af05cf"), "name" : "john", "id" :
"20bd1a05051", "course" : "b.tech", "branch" : "cse" }

{ "_id" : ObjectId("62a99ebd3dbaba59a0af05d0"), "name" : "reena", "id" :
"20bd1a0502", "course" : "M.tech", "branch" : "it" }

{ "_id" : ObjectId("62a99f123dbaba59a0af05d1"), "name" : "ram", "id" :
"20bd1a0503", "course" : "b.tech", "branch" : "cse" }
```

EXPERIMENT 7

7. **Create a form such that, based on student roll number provided by user, the student details should be fetched (using ExpressJS)**

File structure :



```
EXPLORER ...
∨ FETCHST...
  ∨ controller
    JS searchdb.js
    JS searchStudent.js
  ∨ model
    JS student.js
  > node_modules
  ∨ view
    <> search.ejs
  JS app.js
  {} package-lock.json
  {} package.json
```

app.js

```
var express = require('express');
var app = express();
const html = require('ejs')
const path=require('path')
app.use(express.json());
app.use(express.urlencoded({
  extended: true
}));

app.set('views', path.join(__dirname, 'view'))
app.set('view engine','ejs')
const mongoose=require('mongoose')
mongoose.connect('mongodb://localhost/student', function(error){
    if(error) console.log(error);
```

```
        console.log("connection successful");
});

const searchStudentController = require('./controller/searchStudent')
const fetchController= require('./controller/searchdb');
app.get('/search',searchStudentController)
app.post('/student/fetch',fetchController);

app.listen(3000, () => console.log("App listening on port 3000!"));
```

searchdb.js

```
const Student = require('../model/student.js')
module.exports = (req,res)=>{
        // console.log(req.body.rollno);
        // var test=Student.find({id: req.body.rollno});
        Student.find({id: req.body.rollno}, (error, student) => {
            if(error){
              console.log(student)
               res.render('search',{stuData:student});
            }
            else{

               console.log(student)
               res.render('search',{stuData:student, view:true});
            }

        })
}
```

searchStudent.js

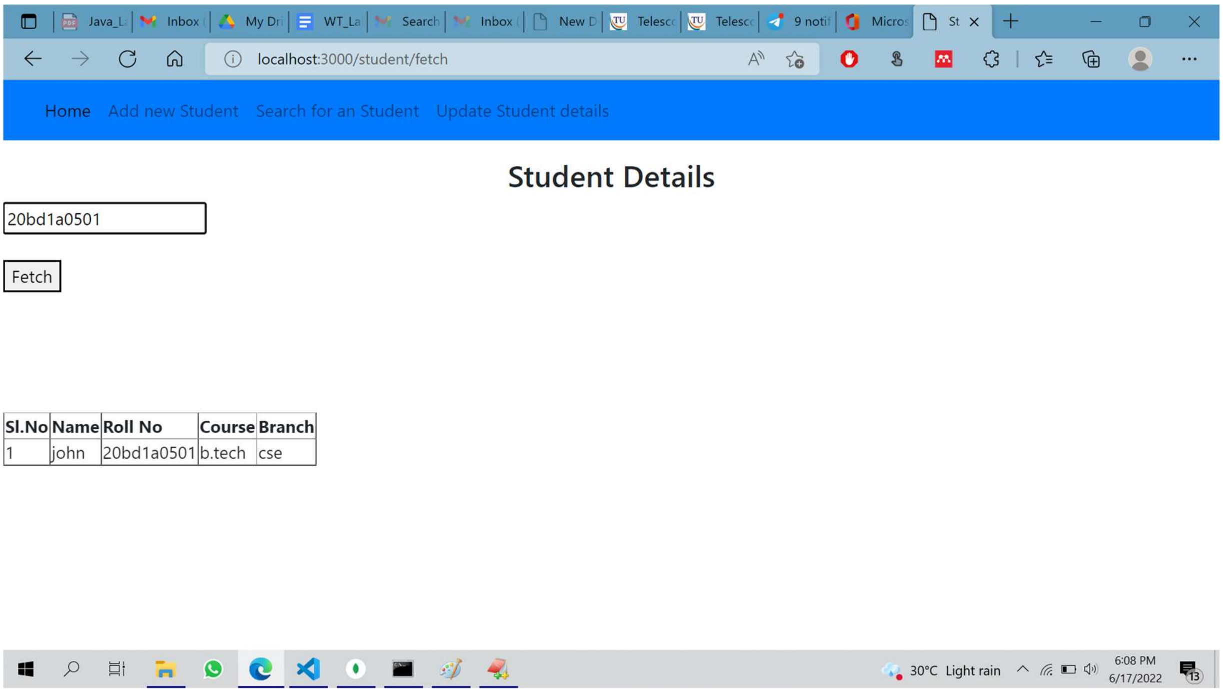
```
module.exports = (req, res) =>{
    student=[]
    res.render('search',{stuData:student, view:false});
}

model/student.js
const mongoose = require('mongoose')
const Schema = mongoose.Schema;

const StudentSchema = new Schema({
    name: {
        type: String,
        required: true,
        unique: true
    },
    id: {
        type: String,
        required: true
    },
    course: {
        type: String,
        required: true
    } ,
    branch: {
        type: String,
        required: true
    }
})


// export model
const Student = mongoose.model('studentinfo',StudentSchema);
module.exports = Student
```

view/search.ejs

```
<html>
  <head>
    <title>Student Portal</title>
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
  </head>
<body>
<nav class="navbar navbar-expand-lg navbar-light bg-primary fixed-top">
  <div class="container-fluid">
     <button
      class="navbar-toggler"
      type="button"
      data-mdb-toggle="collapse"
      data-mdb-target="#navbarExample01"
      aria-controls="navbarExample01"
      aria-expanded="false"
      aria-label="Toggle navigation"
     >

      <i class="fas fa-bars"></i>
     </button>
     <div class="collapse navbar-collapse" id="navbarExample01">
      <ul class="navbar-nav me-auto mb-2 mb-lg-0">
        <li class="nav-item active">
          <a class="nav-link" aria-current="page" href="/">Home</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="#">Add new Student</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="./search.ejs">Search for an Student </a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="#">Update Student details</a>
        </li>
      </ul>
    </div>
  </div>
</nav>
  <br><br><br>
  <h3 style="text-align: center;">Student Details </h3>

  <form action="/student/fetch" method="POST">
      <input type="text" placeholder="Search by rollno" id="rollno" name="rollno"> <br><br>
      <button type="submit">Fetch</button>
  </form>
  <br><br>
<br><br>
  <%
      if(view){
  %>
          <table border="1" id="table">
      <tr>
        <th>Sl.No</th>
          <th>Name</th>
          <th>Roll No</th>
          <th>Course</th>
          <th>Branch</th>
      </tr>
      <%
      if(stuData.length!=0){
      var i=1;
      stuData.forEach(function(data){
      %>
```

```
        <tr>
            <td><%=i; %></td>
            <td><%=data.name %></td>
            <td><%=data.id %></td>
            <td><%=data.course %></td>
            <td><%=data.branch %></td>
        </tr>
        <%  i++; }) %>
        <% } else{ %>
            <tr>
                <td colspan="4">No Data Found</td>
            </tr>
        <% } %>
    </table>
    <% } %>
</body>
</html>
```

EXPECTED OUTPUT



Student Details

20bd1a0501

Sl.No	Name	Roll No	Course	Branch
1	john	20bd1a0501	b.tech	cse

EXPERIMENT 8

8. Create a form with ExpressJS that enables CRUD (Create, Read, Update and Delete) operations on the student database.

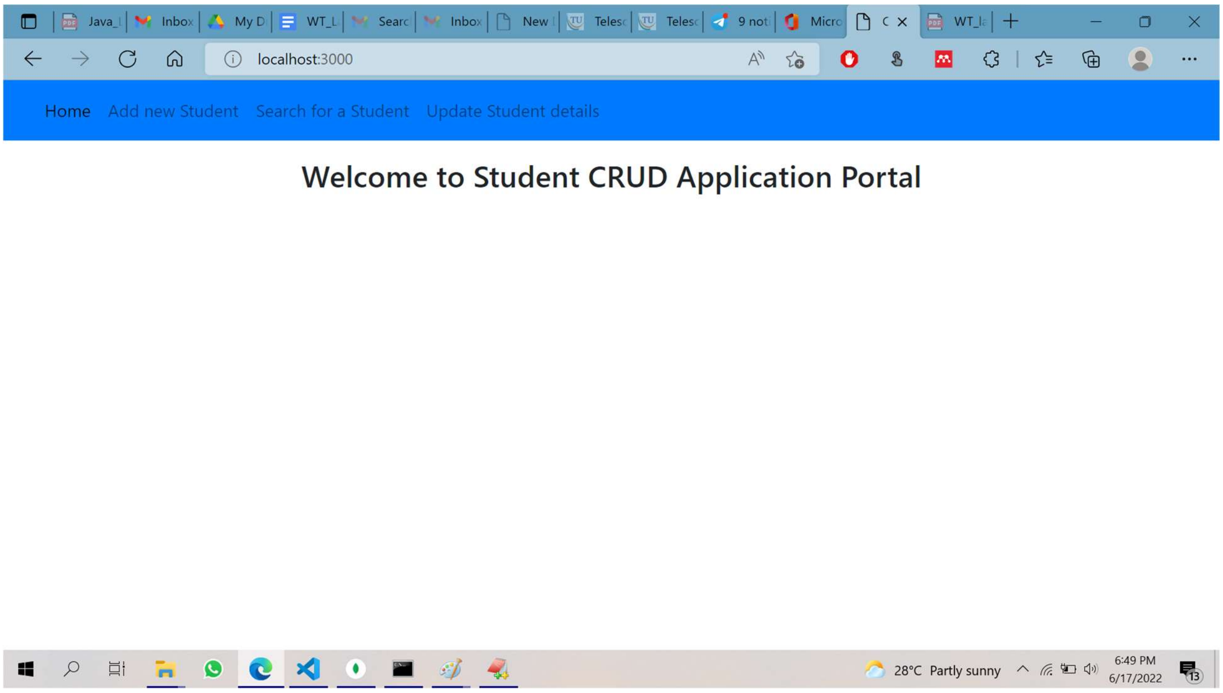
home.ejs

```
<html>
   <head>
      <title>Customer Portal</title>
      <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
      <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
   </head>
<body>




<nav class="navbar navbar-expand-lg navbar-light bg-primary fixed-top">
   <div class="container-fluid">
     <button
```

```
      class="navbar-toggler"
      type="button"
      data-mdb-toggle="collapse"
      data-mdb-target="#navbarExample01"
      aria-controls="navbarExample01"
      aria-expanded="false"
      aria-label="Toggle navigation"
     >

      <i class="fas fa-bars"></i>
     </button>
     <div class="collapse navbar-collapse" id="navbarExample01">
      <ul class="navbar-nav me-auto mb-2 mb-lg-0">
        <li class="nav-item active">
         <a class="nav-link" aria-current="page" href="/">Home</a>
        </li>
        <li class="nav-item">
         <a class="nav-link" href="/page/register">Add new Student</a>
        </li>
        <li class="nav-item">
         <a class="nav-link" href="/page/search">Search for an Student </a>
        </li>
        <li class="nav-item">
         <a class="nav-link" href="/page/update">Update Student details</a>
        </li>
      </ul>
     </div>
    </div>
  </nav>

    <br><br><br>
    <h3 style="text-align: center;">Welcome to Student CRUD Application Portal </h3>
</body>
```

```
</html>
```

EXPECTED OUTPUT :



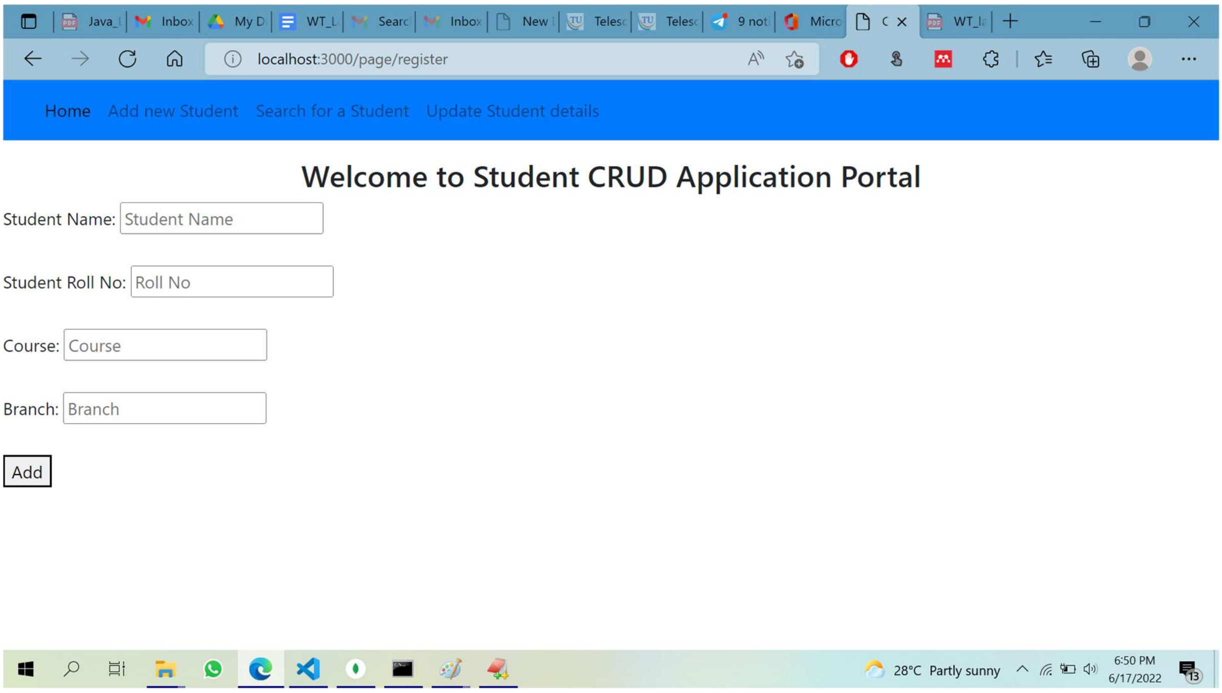
Welcome to Student CRUD Application Portal

register.ejs

```
<html>
   <head>
      <title>Customer Portal</title>
      <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
      <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
   </head>
<body>

<nav class="navbar navbar-expand-lg navbar-light bg-primary fixed-top">
   <div class="container-fluid">
     <button
      class="navbar-toggler"
      type="button"
      data-mdb-toggle="collapse"
      data-mdb-target="#navbarExample01"
      aria-controls="navbarExample01"
      aria-expanded="false"
      aria-label="Toggle navigation"
    >
      <i class="fas fa-bars"></i>
    </button>
    <div class="collapse navbar-collapse" id="navbarExample01">
      <ul class="navbar-nav me-auto mb-2 mb-lg-0">
        <li class="nav-item active">
          <a class="nav-link" aria-current="page" href="/">Home</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="/page/register">Add new Student</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="/page/search">Search for a Student </a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="/page/update">Update Student details</a>
        </li>
      </ul>
    </div>
  </div>
</nav>

  <br><br><br>
  <h3 style="text-align: center;">Welcome to Student CRUD Application Portal </h3>

  <form action="/customer/register" method="POST">
    <label for="sname">Student Name:</label>
      <input type="text" placeholder="Student Name" id="name" name="name"> <br><br>
      <label for="id">Student Roll No:</label>
```

```
        <input type="text" placeholder="Roll No" id="id" name="id"> <br><br>
        <label for="course">Course:</label>
        <input type="text" placeholder="Course" id="course" name="course" > <br><br>
        <label for="branch">Branch:</label>
        <input type="text" placeholder="Branch" id="branch" name="branch"> <br><br>
        <button type="submit" >Add</button>
    </form>
    <h1> <%= status %> </h1>
</body>
</html>
```

EXPECTED OUTPUT :



Welcome to Student CRUD Application Portal

Student Name: Student Name

Student Roll No: Roll No

Course: Course

Branch: Branch

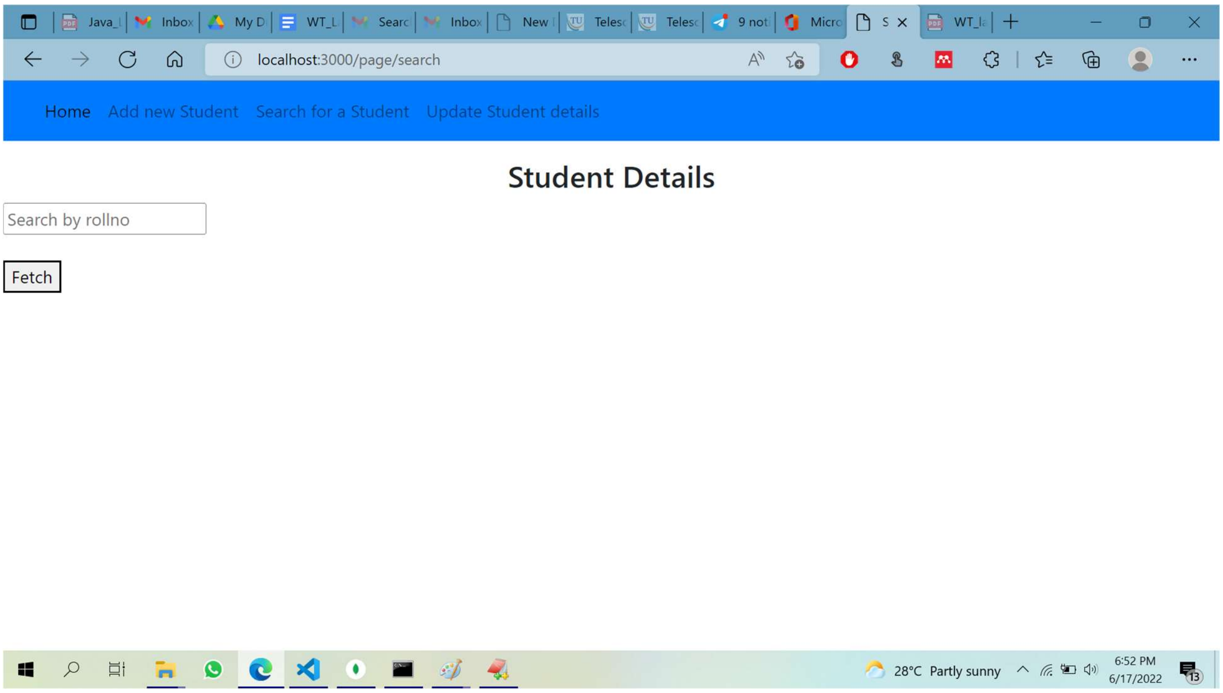
search.ejs

```
<html>
    <head>
        <title>Student Portal</title>
        <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
```

```
      <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
  </head>
<body>
<nav class="navbar navbar-expand-lg navbar-light bg-primary fixed-top">
  <div class="container-fluid">
    <button
      class="navbar-toggler"
      type="button"
      data-mdb-toggle="collapse"
      data-mdb-target="#navbarExample01"
      aria-controls="navbarExample01"
      aria-expanded="false"
      aria-label="Toggle navigation"
    >

      <i class="fas fa-bars"></i>
    </button>
    <div class="collapse navbar-collapse" id="navbarExample01">
      <ul class="navbar-nav me-auto mb-2 mb-lg-0">
        <li class="nav-item active">
          <a class="nav-link" aria-current="page" href="/">Home</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="/page/register">Add new Student</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="./search.ejs">Search for a Student </a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="/page/update">Update Student details</a>
        </li>
      </ul>
    </div>
  </div>
</nav>
  <br><br><br>
  <h3 style="text-align: center;">Student Details </h3>

  <form action="/student/fetch" method="POST">
     <input type="text" placeholder="Search by rollno" id="rollno" name="rollno"> <br><br>
     <button type="submit">Fetch</button>
  </form>
  <br><br>
<br><br>
  <%
     if(view){
  %>
        <table border="1" id="table">
     <tr>
       <th>Sl.No</th>
        <th>Name</th>
        <th>Roll No</th>
        <th>Course</th>
        <th>Branch</th>
     </tr>
     <%
     if(stuData.length!=0){
     var i=1;
     stuData.forEach(function(data){
     %>
     <tr>
        <td><%=i; %></td>
        <td><%=data.name %></td>
        <td><%=data.id %></td>
        <td><%=data.course %></td>
        <td><%=data.branch %></td>
        </tr>
        <%  i++; }) %>
        <% } else{ %>
            <tr>
                <td colspan="4">No Data Found</td>
            </tr>
        <% } %>
    </table>
    <% } %>
</body>
</html>
```

Ex

EXPECTED OUTPUT :

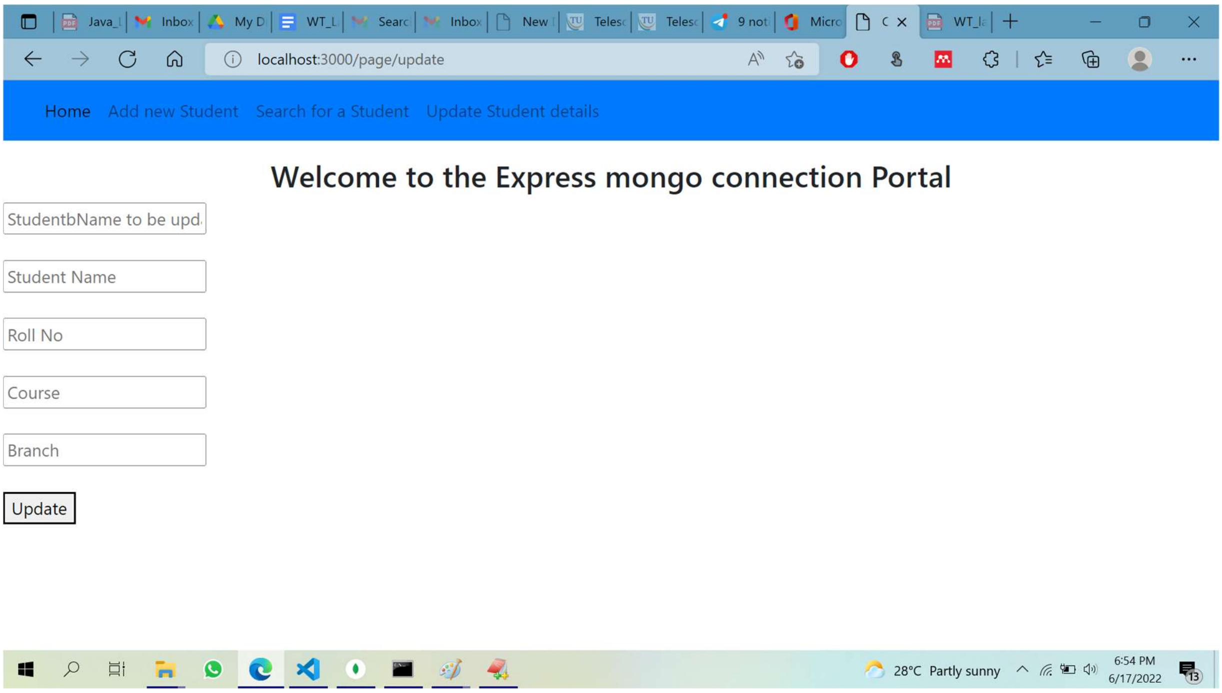


update.ejs

```
<html>
  <head>
    <title>Customer Portal</title>
    <link                                                          rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
  </head>
<body>

<nav class="navbar navbar-expand-lg navbar-light bg-primary fixed-top">
  <div class="container-fluid">
   <button
    class="navbar-toggler"
    type="button"
    data-mdb-toggle="collapse"
    data-mdb-target="#navbarExample01"
    aria-controls="navbarExample01"
    aria-expanded="false"
    aria-label="Toggle navigation"
   >
    <i class="fas fa-bars"></i>
   </button>
   <div class="collapse navbar-collapse" id="navbarExample01">
    <ul class="navbar-nav me-auto mb-2 mb-lg-0">
     <li class="nav-item active">
      <a class="nav-link" aria-current="page" href="/">Home</a>
     </li>
     <li class="nav-item">
      <a class="nav-link" href="/page/register">Add new Student</a>
     </li>
     <li class="nav-item">
      <a class="nav-link" href="/page/search">Search for a Student </a>
     </li>
     <li class="nav-item">
      <a class="nav-link" href="/page/update">Update Student details</a>
     </li>
    </ul>
   </div>
  </div>
 </nav>

  <br><br><br>
  <h3 style="text-align: center;">Welcome to the Express mongo connection Portal </h3>

  <form action="/customer/update" method="POST">
    <input type="text" placeholder="StudentbName to be update" id="cname" name="cname">
```

```
<br><br>
        <input type="text" placeholder="Student Name" id="name" name="name"> <br><br>
        <input type="email" placeholder="Roll No" id="id" name="id"> <br><br>
        <input type="text" placeholder="Course" id="course" name="course" > <br><br>
        <input type="text" placeholder="Branch" id="branch" name="branch"> <br><br>
        <button type="submit" >Update</button>
    </form>
    <h1> <%= status %> </h1>
</body>
</html>
```

EXPECTED OUTPUT :



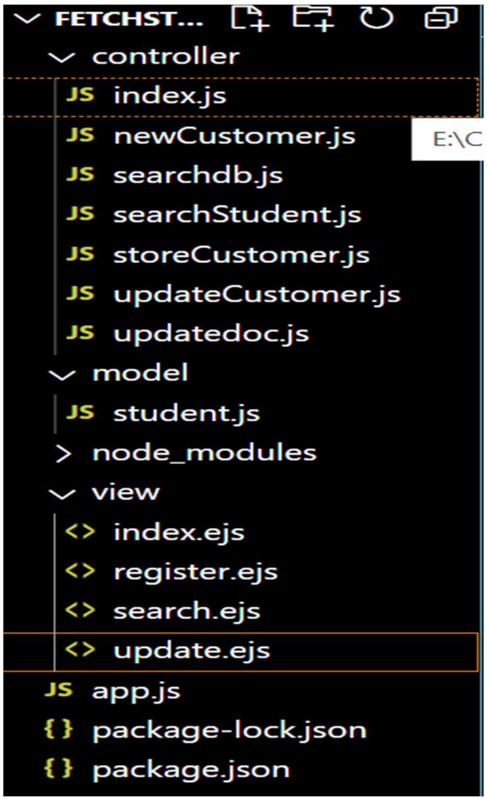
localhost:3000/page/update

Welcome to the Express mongo connection Portal

EXPERIMENT 9

9. **Create a simple website for the CRUD operations on student DB and apply Express Routing.**

file Structure:



```
FETCHST...
  controller
    index.js
    newCustomer.js
    searchdb.js
    searchStudent.js
    storeCustomer.js
    updateCustomer.js
    updatedoc.js
  model
    student.js
  node_modules
  view
    index.ejs
    register.ejs
    search.ejs
    update.ejs
  app.js
  package-lock.json
  package.json
```

controller/index.js

```
module.exports = (req, res) =>{
   res.render('index')
}
```

newCustomer.js

```
module.exports = (req, res) =>{
   data = '  '
```

```
  res.render('register',{status:data}); // render register.ejs
}
```

searchdb.js

```
const Student = require('../model/student.js')
module.exports = (req,res)=>{
    // console.log(req.body.rollno);
    // var test=Student.find({id: req.body.rollno});
    Student.find({id: req.body.rollno}, (error, student) => {
      if(error){
        console.log(student)
        res.render('search',{stuData:student});
      }
      else{

        console.log(student)
        res.render('search',{stuData:student, view:true});
      }

    })
}
```

searchStudent.js

```
module.exports = (req, res) =>{
  student=[]
  res.render('search',{stuData:student, view:false});
}
```

storeCustomer.js

```
const Student = require('../model/student.js')
const path = require('path')

module.exports = (req,res)=>{ console.log(req.body)
```

```
  Student.create(req.body, (error, student) => {
    if(error){
      console.log(error)
      data='Can Not Insert Student Details Please Try Agin';
      res.render('register',{status:data});
    }
    else{
      data = 'Student Details Inserted Successfully'
      res.render('register',{status:data});
    }

  })
}
```

updateCustomer.js

```
module.exports = (req, res) =>{
  data = '   '
  res.render('update',{status:data}); // render update.ejs
}
```

updatedoc.js

```
const Student = require('../model/student.js')

module.exports = (req,res)=>{
  var test={};
  if(req.body.name){
  test.name=req.body.name };
  if(req.body.id){
    test.id=req.body.id };
  if(req.body.course){
      test.course=req.body.course };
```

```
   if(req.body.branch){
            test.branch=req.body.branch };
           // console.log(test);

Student.updateOne({name: req.body.cname}, { $set: test  },(error, student) => {
   if(error){
      console.log(student)
      data='Can Not Update Student Details Please Try Agin';
      res.render('update',{status:data});
   }
   else{
      data = 'Student Details Updated Successfully'
      res.render('update',{status:data});
   }
}
)
}
//{cname: req.body.cnamenew, email: req.body.email, phone: req.body.phone, city:
req.body.city }
```

model/student.js

```
const mongoose = require('mongoose')
const Schema = mongoose.Schema;

const StudentSchema = new Schema({
   name: {
      type: String,
      required: true,
      unique: true
   },
   id: {
      type: String,
        required: true
    },
    course: {
        type: String,
        required: true
    } ,
    branch: {
        type: String,
        required: true
    }
})


// export model
const Student = mongoose.model('studentinfo',StudentSchema);
module.exports = Student
```

home.ejs

```
<html>
    <head>
        <title>Customer Portal</title>
        <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
        <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
    </head>
<body>



<nav class="navbar navbar-expand-lg navbar-light bg-primary fixed-top">
    <div class="container-fluid">
      <button
```

```
        class="navbar-toggler"
        type="button"
        data-mdb-toggle="collapse"
        data-mdb-target="#navbarExample01"
        aria-controls="navbarExample01"
        aria-expanded="false"
        aria-label="Toggle navigation"
      >

        <i class="fas fa-bars"></i>
      </button>
      <div class="collapse navbar-collapse" id="navbarExample01">
        <ul class="navbar-nav me-auto mb-2 mb-lg-0">
          <li class="nav-item active">
            <a class="nav-link" aria-current="page" href="/">Home</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="/page/register">Add new Student</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="/page/search">Search for an Student </a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="/page/update">Update Student details</a>
          </li>
        </ul>
      </div>
    </div>
  </nav>

    <br><br><br>
    <h3 style="text-align: center;">Welcome to Student CRUD Application Portal </h3>
</body>
```

```
</html>
```

register.ejs

```
<html>
  <head>
    <title>Customer Portal</title>
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
  </head>
<body>

<nav class="navbar navbar-expand-lg navbar-light bg-primary fixed-top">
  <div class="container-fluid">
   <button
    class="navbar-toggler"
    type="button"
    data-mdb-toggle="collapse"
    data-mdb-target="#navbarExample01"
    aria-controls="navbarExample01"
    aria-expanded="false"
    aria-label="Toggle navigation"
   >
    <i class="fas fa-bars"></i>
   </button>
   <div class="collapse navbar-collapse" id="navbarExample01">
    <ul class="navbar-nav me-auto mb-2 mb-lg-0">
     <li class="nav-item active">
      <a class="nav-link" aria-current="page" href="/">Home</a>
     </li>
     <li class="nav-item">
```

```
      <a class="nav-link" href="/page/register">Add new Student</a>
     </li>
     <li class="nav-item">
      <a class="nav-link" href="/page/search">Search for a Student </a>
     </li>
     <li class="nav-item">
      <a class="nav-link" href="/page/update">Update Student details</a>
     </li>
    </ul>
   </div>
  </div>
 </nav>

  <br><br><br>
  <h3 style="text-align: center;">Welcome to Student CRUD Application Portal </h3>

  <form action="/customer/register" method="POST">
   <label for="sname">Student Name:</label>
    <input type="text" placeholder="Student Name" id="name" name="name"> <br><br>
    <label for="id">Student Roll No:</label>
    <input type="text" placeholder="Roll No" id="id" name="id"> <br><br>
    <label for="course">Course:</label>
    <input type="text" placeholder="Course" id="course" name="course" > <br><br>
    <label for="branch">Branch:</label>
    <input type="text" placeholder="Branch" id="branch" name="branch"> <br><br>
    <button type="submit" >Add</button>
  </form>
  <h1> <%= status %> </h1>
</body>
</html>
```

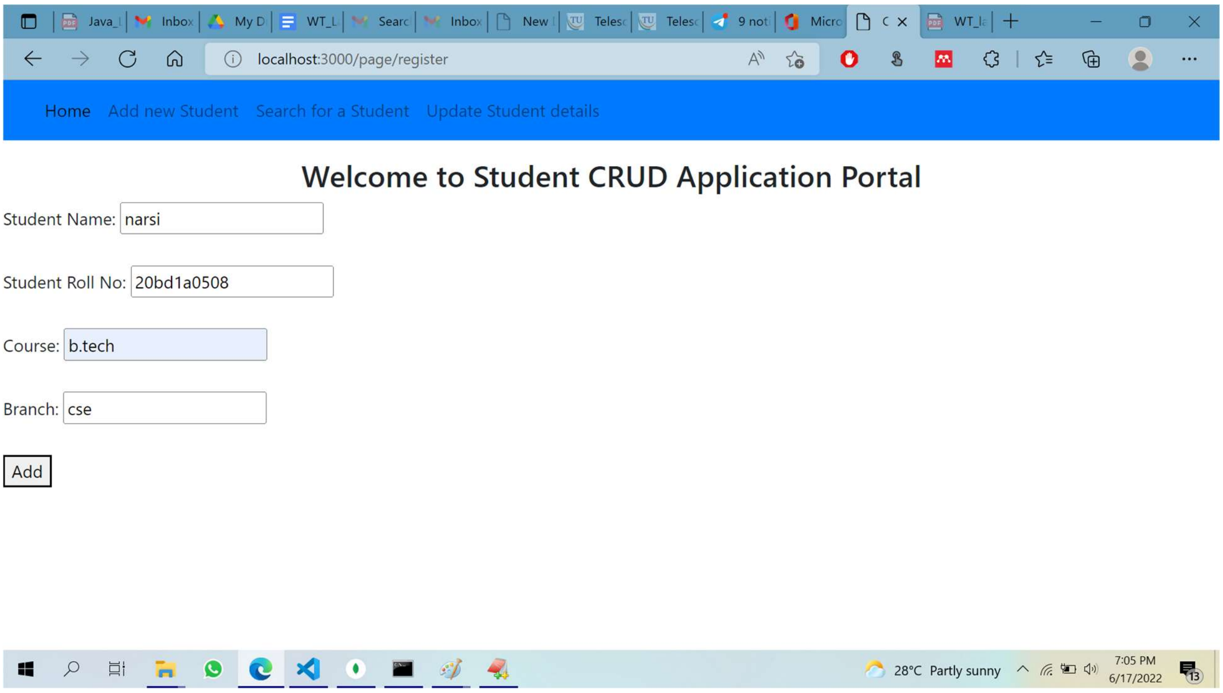
search.ejs

```
<html>
  <head>
    <title>Student Portal</title>
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
  </head>
<body>
<nav class="navbar navbar-expand-lg navbar-light bg-primary fixed-top">
  <div class="container-fluid">
   <button
    class="navbar-toggler"
    type="button"
    data-mdb-toggle="collapse"
    data-mdb-target="#navbarExample01"
    aria-controls="navbarExample01"
    aria-expanded="false"
    aria-label="Toggle navigation"
   >

    <i class="fas fa-bars"></i>
   </button>
   <div class="collapse navbar-collapse" id="navbarExample01">
    <ul class="navbar-nav me-auto mb-2 mb-lg-0">
     <li class="nav-item active">
      <a class="nav-link" aria-current="page" href="/">Home</a>
     </li>
     <li class="nav-item">
      <a class="nav-link" href="/page/register">Add new Student</a>
     </li>
     <li class="nav-item">
     <a class="nav-link" href="./search.ejs">Search for a Student </a>
    </li>
    <li class="nav-item">
     <a class="nav-link" href="/page/update">Update Student details</a>
    </li>
   </ul>
  </div>
 </div>
</nav>
 <br><br><br>
 <h3 style="text-align: center;">Student Details </h3>

 <form action="/student/fetch" method="POST">
   <input type="text" placeholder="Search by rollno" id="rollno" name="rollno"> <br><br>
   <button type="submit">Fetch</button>
 </form>
 <br><br>
<br><br>
 <%
   if(view){
 %>
     <table border="1" id="table">
   <tr>
    <th>Sl.No</th>
     <th>Name</th>
     <th>Roll No</th>
     <th>Course</th>
     <th>Branch</th>
   </tr>
   <%
   if(stuData.length!=0){
   var i=1;
   stuData.forEach(function(data){
        %>
        <tr>
            <td><%=i; %></td>
            <td><%=data.name %></td>
            <td><%=data.id %></td>
            <td><%=data.course %></td>
            <td><%=data.branch %></td>
        </tr>
        <%  i++; }) %>
        <% } else{ %>
            <tr>
                <td colspan="4">No Data Found</td>
            </tr>
        <% } %>
    </table>
    <% } %>
</body>
</html>
```

update.ejs

```
<html>
    <head>
        <title>Customer Portal</title>
        <link                                                          rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
        <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
    </head>
<body>

<nav class="navbar navbar-expand-lg navbar-light bg-primary fixed-top">
    <div class="container-fluid">
      <button
        class="navbar-toggler"
        type="button"
        data-mdb-toggle="collapse"
        data-mdb-target="#navbarExample01"
        aria-controls="navbarExample01"
        aria-expanded="false"
        aria-label="Toggle navigation"
      >
        <i class="fas fa-bars"></i>
      </button>
      <div class="collapse navbar-collapse" id="navbarExample01">
        <ul class="navbar-nav me-auto mb-2 mb-lg-0">
          <li class="nav-item active">
            <a class="nav-link" aria-current="page" href="/">Home</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="/page/register">Add new Student</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="/page/search">Search for a Student </a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="/page/update">Update Student details</a>
          </li>
        </ul>
      </div>
    </div>
  </nav>

    <br><br><br>
    <h3 style="text-align: center;">Welcome to the Express mongo connection Portal </h3>

    <form action="/customer/update" method="POST">
        <input type="text" placeholder="StudentbName to be update" id="cname" name="cname">
<br><br>
        <input type="text" placeholder="Student Name" id="name" name="name"> <br><br>
        <input type="email" placeholder="Roll No" id="id" name="id"> <br><br>
        <input type="text" placeholder="Course" id="course" name="course" > <br><br>
        <input type="text" placeholder="Branch" id="branch" name="branch"> <br><br>
        <button type="submit" >Update</button>
    </form>
    <h1> <%= status %> </h1>
</body>
</html>
```

EXPECTED OUTPUT



Welcome to Student CRUD Application Portal

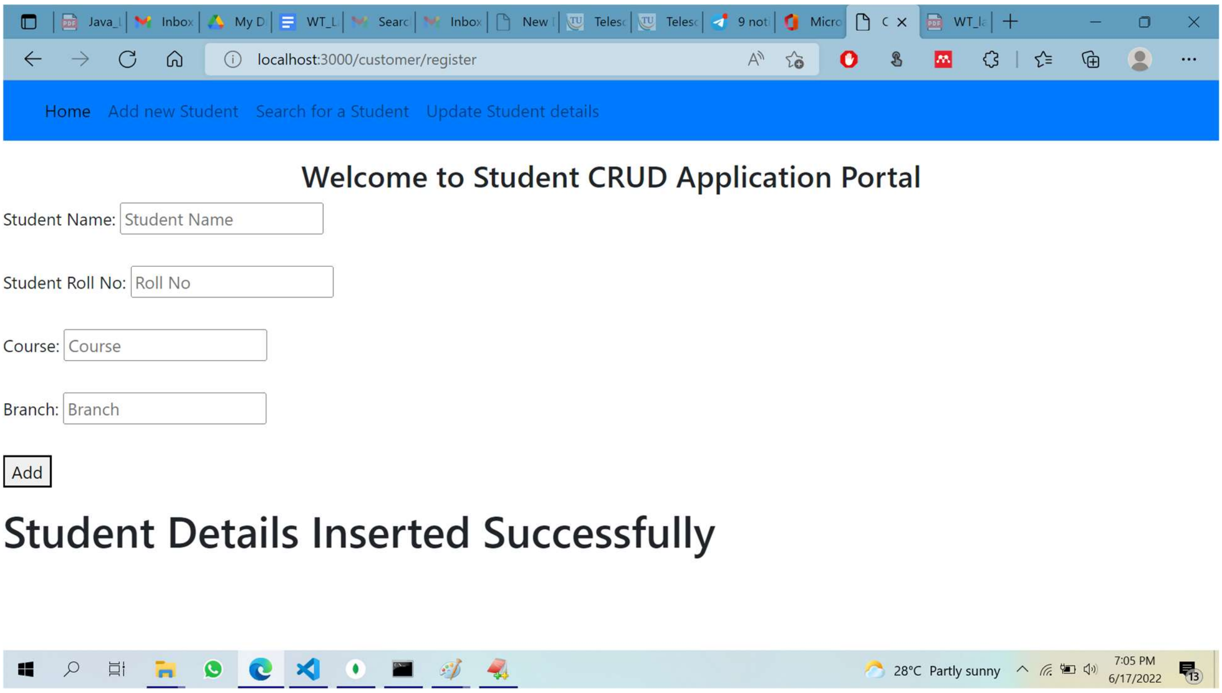
Student Name: narsi

Student Roll No: 20bd1a0508

Course: b.tech

Branch: cse

Add



Welcome to Student CRUD Application Portal

Student Name: Student Name

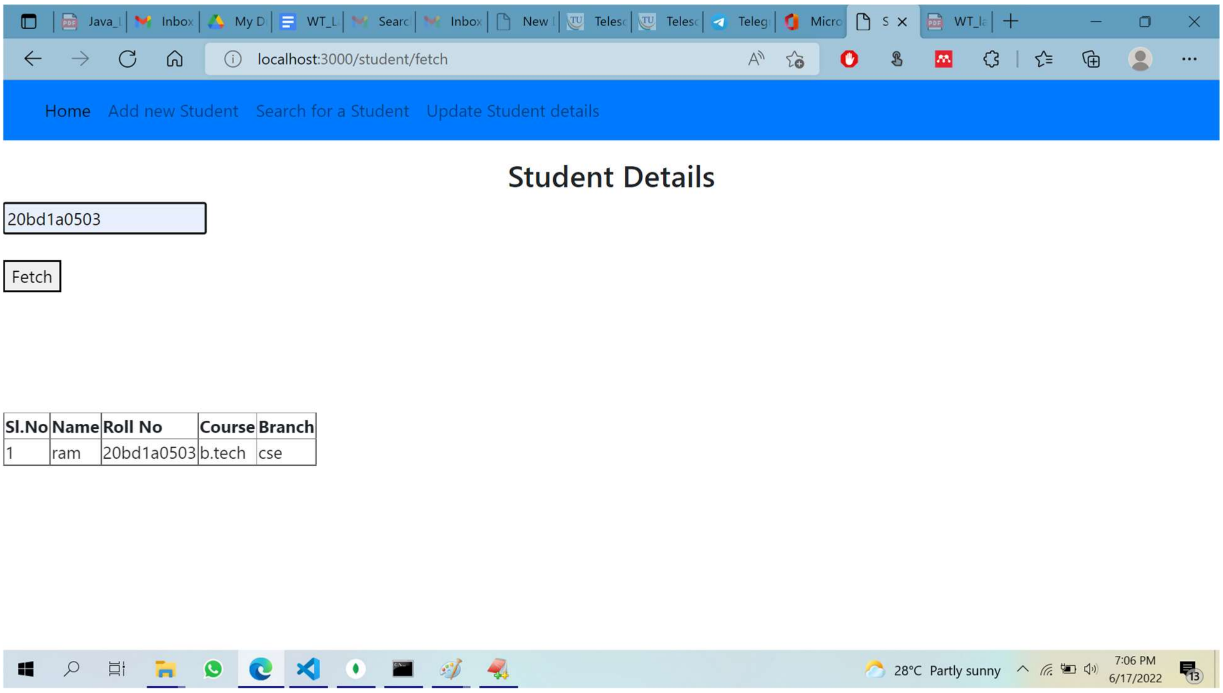
Student Roll No: Roll No

Course: Course

Branch: Branch

Add

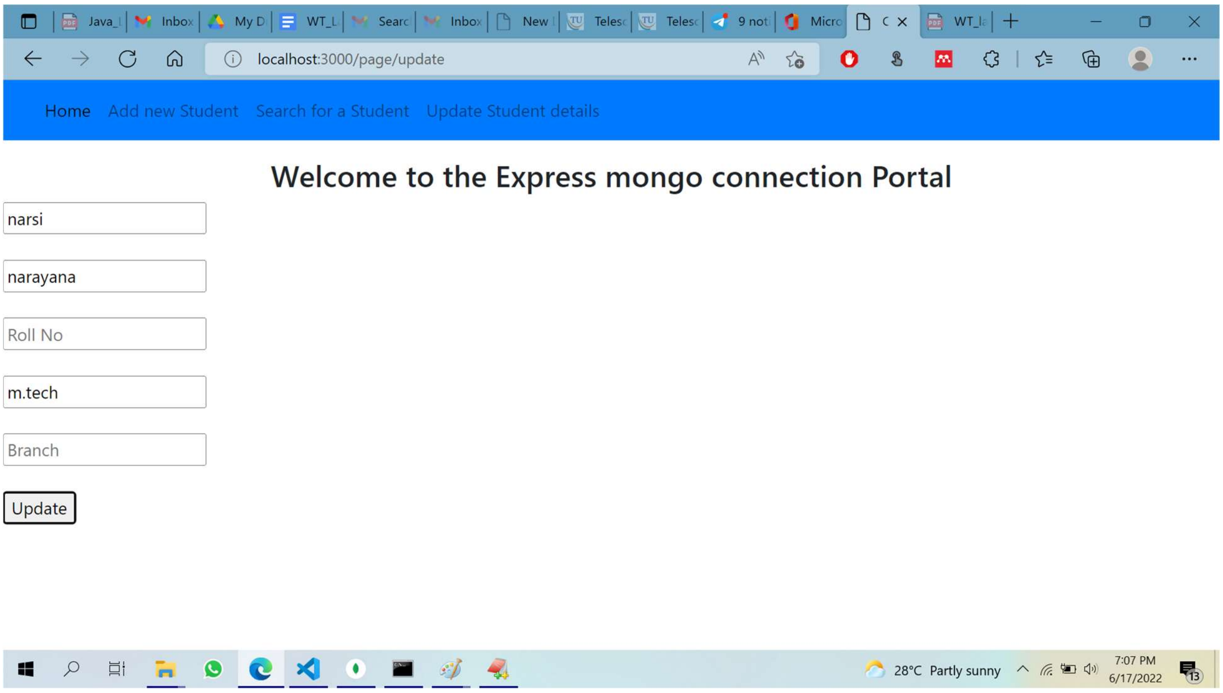
Student Details Inserted Successfully



Student Details

20bd1a0503

Sl.No	Name	Roll No	Course	Branch
1	ram	20bd1a0503	b.tech	cse



Welcome to the Express mongo connection Portal

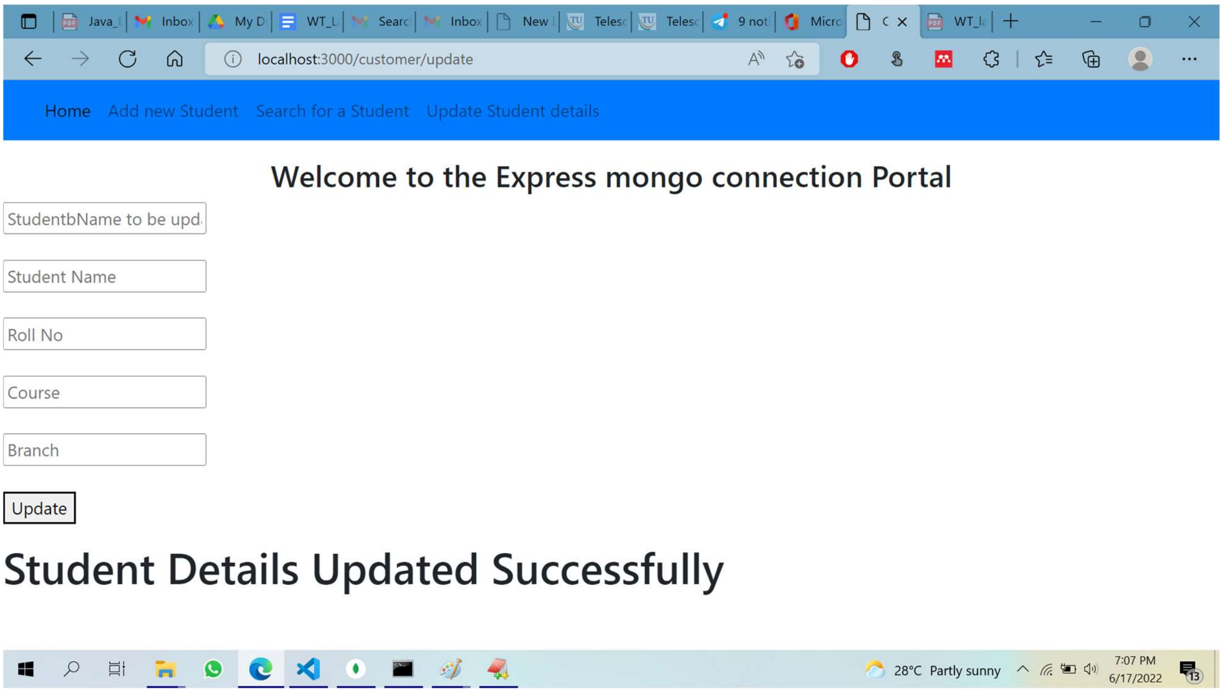
narsi

narayana

Roll No

m.tech

Branch



Welcome to the Express mongo connection Portal

StudentbName to be upd

Student Name

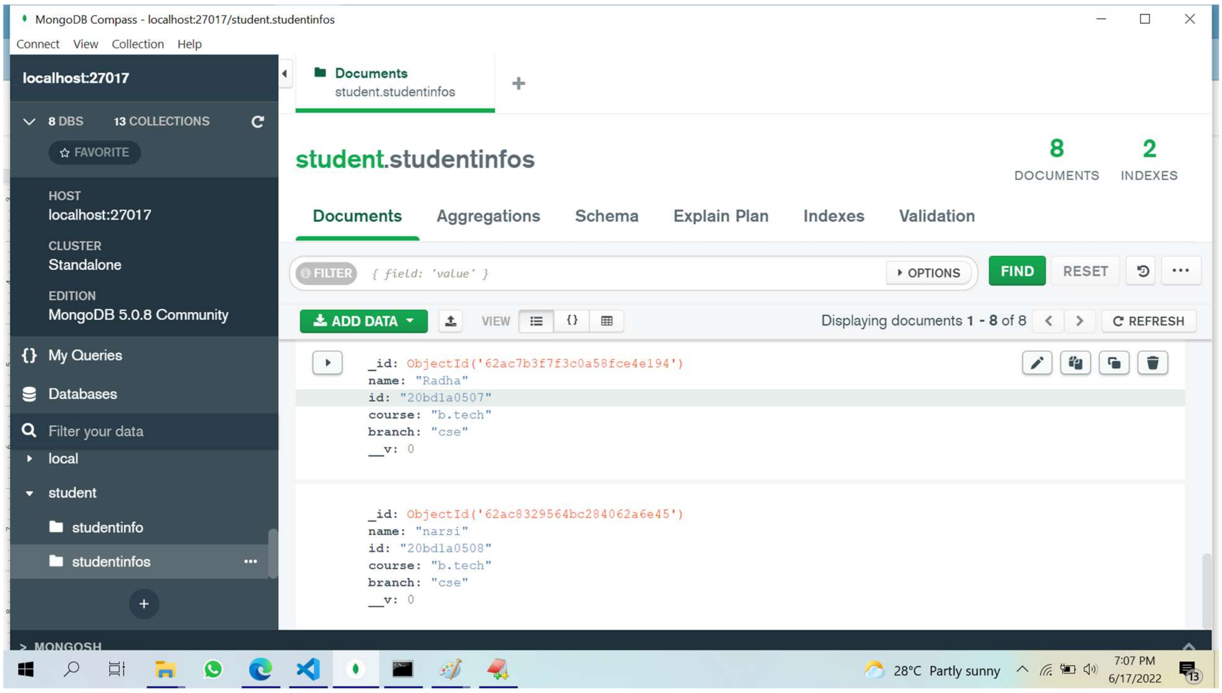
Roll No

Course

Branch

Update

Student Details Updated Successfully



HOST
localhost:27017

CLUSTER
Standalone

EDITION
MongoDB 5.0.8 Community

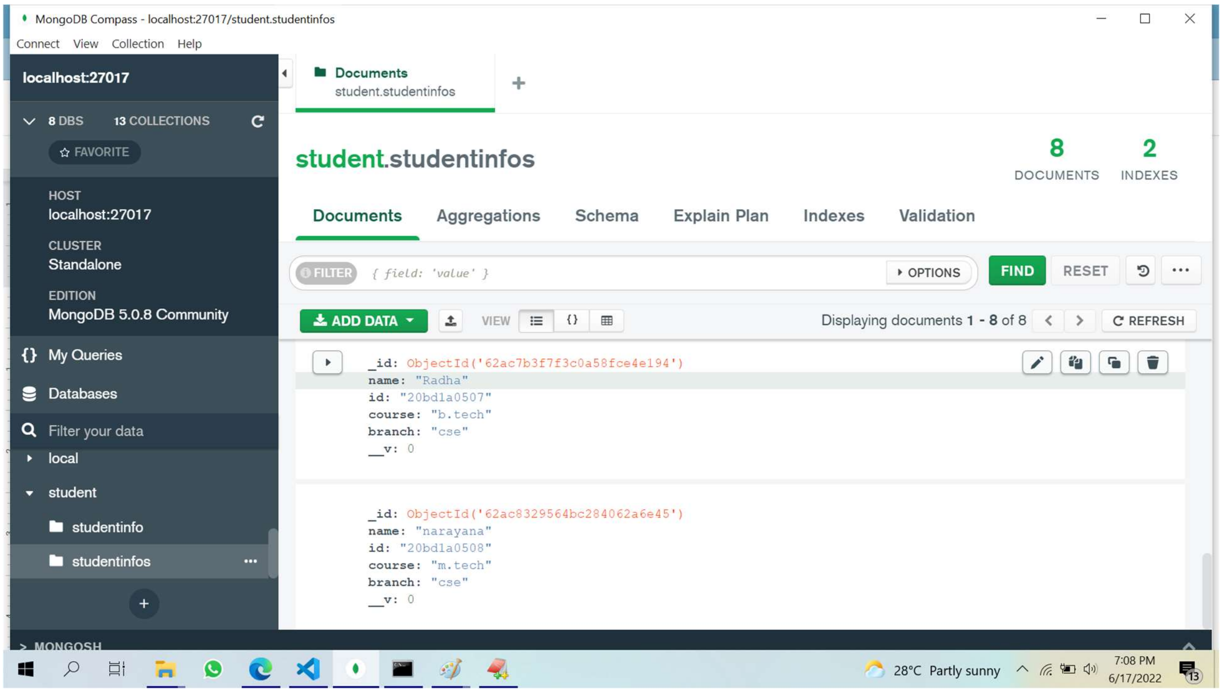
student.studentinfos

8 DOCUMENTS

2 INDEXES

Displaying documents 1 - 8 of 8

```
_id: ObjectId('62ac7b3f7f3c0a58fce4e194')
name: "Radha"
id: "20bd1a0507"
course: "b.tech"
branch: "cse"
__v: 0

_id: ObjectId('62ac8329564bc284062a6e45')
name: "narsi"
id: "20bd1a0508"
course: "b.tech"
branch: "cse"
__v: 0
```



```
_id: ObjectId('62ac7b3f7f3c0a58fce4e194')
name: "Radha"
id: "20bd1a0507"
course: "b.tech"
branch: "cse"
__v: 0

_id: ObjectId('62ac8329564bc284062a6e45')
name: "narayana"
id: "20bd1a0508"
course: "m.tech"
branch: "cse"
__v: 0
```