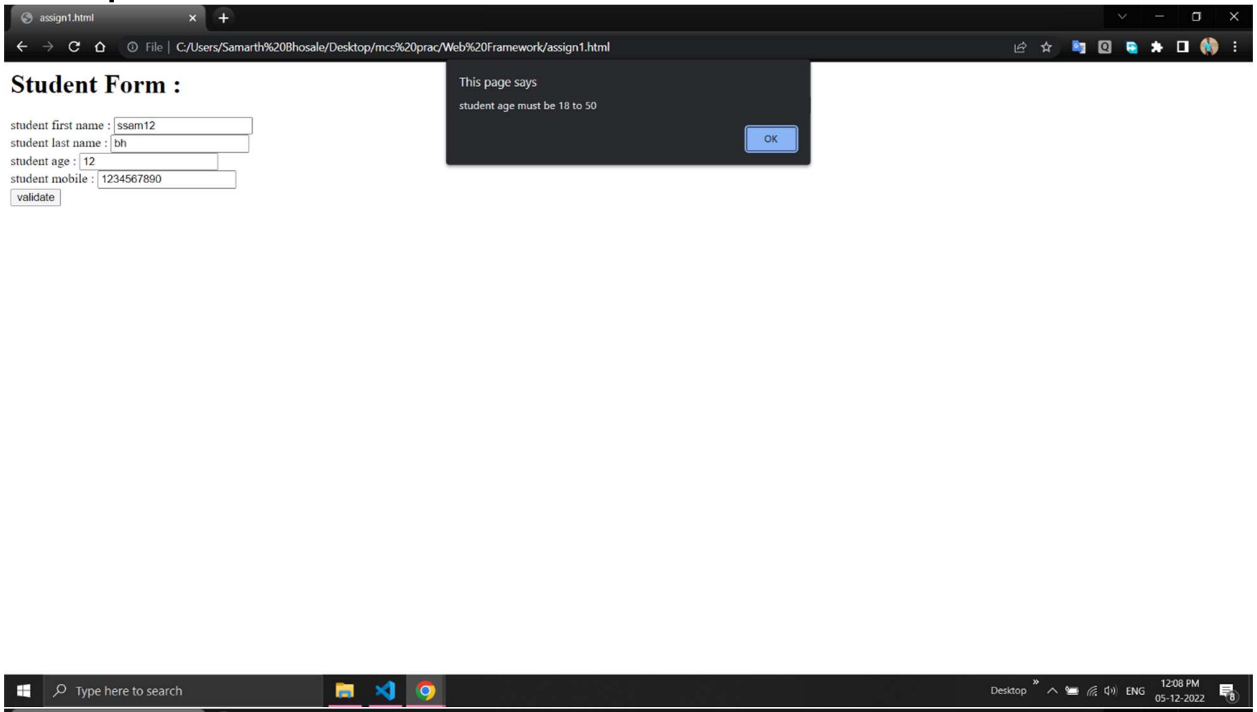
1. Create an HTML form that contain the Student Registration details and write a JavaScript to validate Student first and last name as it should not contain other than alphabets and age should be between 18 to 50.

```
<html>
<head>
    <script type="text/javascript">
        function validateStudent(){
            var regName = /^[a-zA-z]+[a-zA-Z]+$/;
            var fname = document.getElementById('fsname').value;
            var lname = document.getElementById('lsname').value;
            var age = document.getElementById('age').value;
            var phone = document.getElementById('phone').value;

            if(age<18 || age>50)
                alert("student age must be 18 to 50");
            if(!regName.test(fname))
                alert("invalid name");
            if(!regName.test(lname))
                alert("invalid name");
        }
    </script>
</head>
<body>
    <form>
        <h1>Student Form :</h1>
        student first name :
        <input type="text" name="fsname" id="fsname"><br>
        student last name :
        <input type="text" name="lname" id="lsname"><br>
        student age :
        <input type="text" name="age" id="age"><br>
        student mobile :
        <input type="text" name="phone" id="phone"><br>
        <input type="button" value="validate"
onclick="validateStudent()">
    </form>
</body>
</html>
```

//Output:

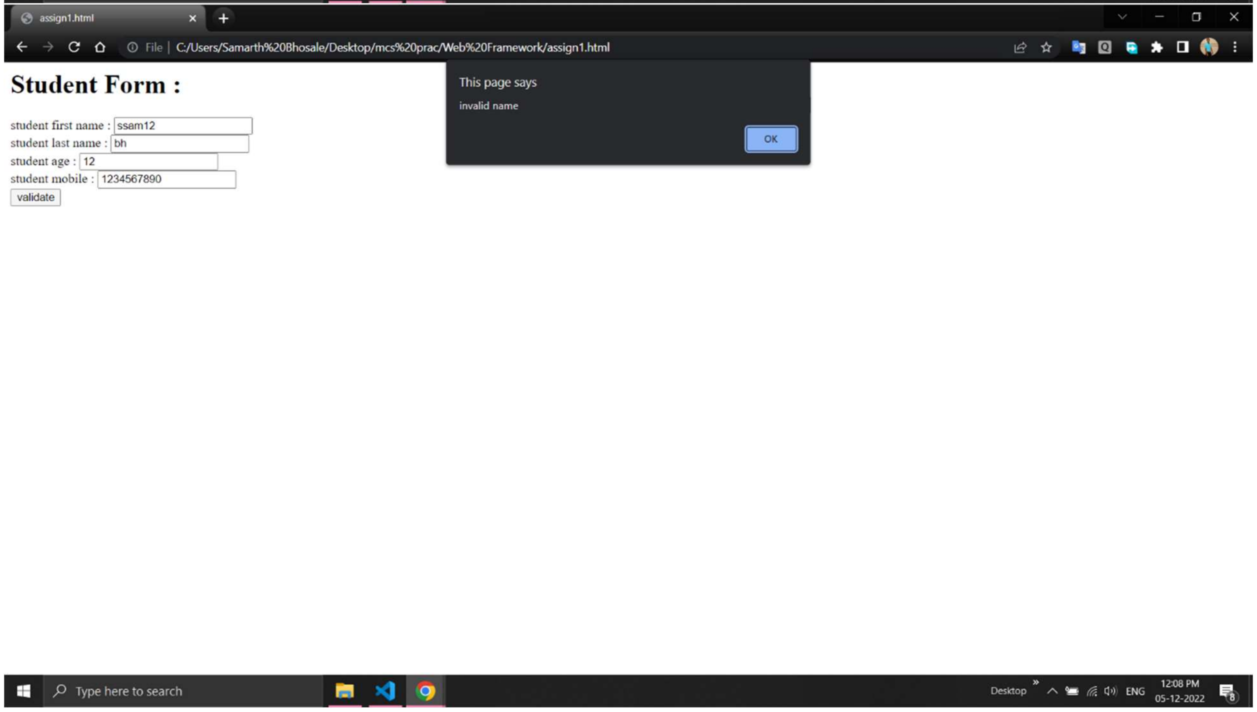


```
assign1.html
File | C:/Users/Samarth%20Bhosale/Desktop/mcs%20prac/Web%20Framework/assign1.html
```

Student Form :

student first name : ssam12
student last name : bh
student age : 12
student mobile : 1234567890
validate

```
This page says
student age must be 18 to 50
```



```
assign1.html
File | C:/Users/Samarth%20Bhosale/Desktop/mcs%20prac/Web%20Framework/assign1.html
```

Student Form :

student first name : ssam12
student last name : bh
student age : 12
student mobile : 1234567890
validate

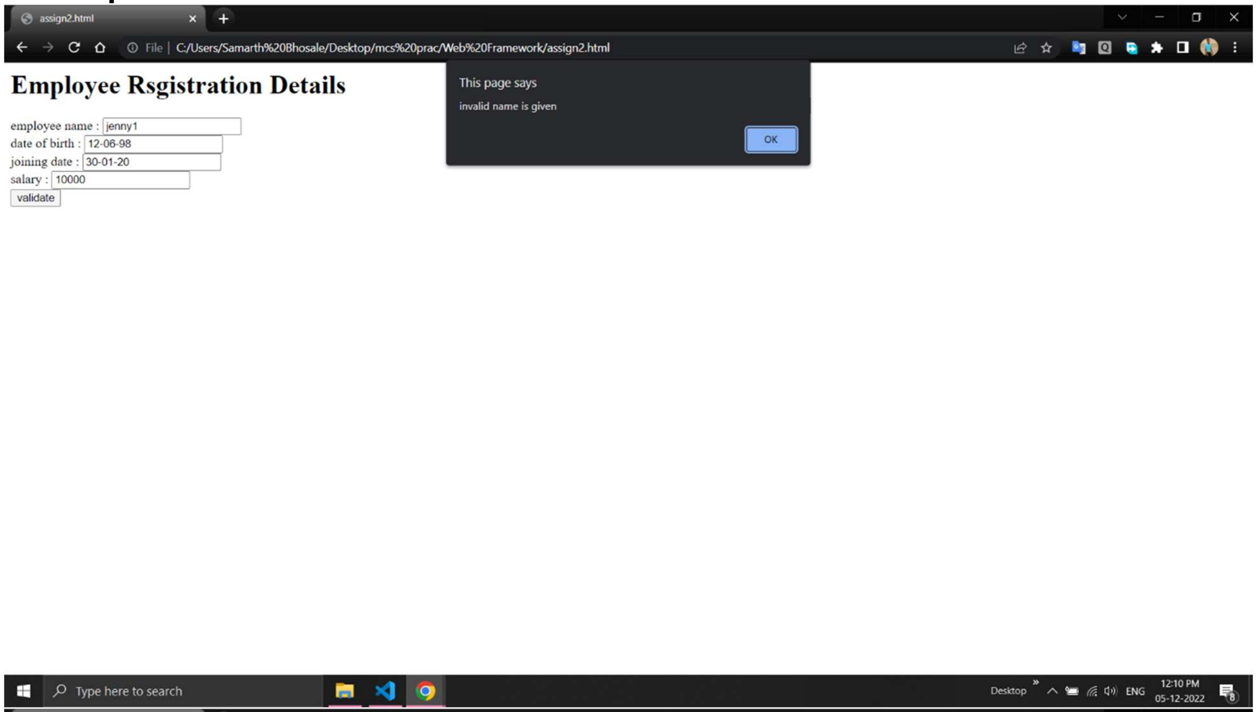
```
This page says
invalid name
```

2. Create an HTML form that contain the Employee Registration details and write a JavaScript to validate DOB, Joining Date, and Salary.

```
<html>
    <head>
        <script type="text/javascript">
            function validate(){
            var regName=/^[a-zA-z]+[a-zA-Z]+$/;
            var dateformatdob = /^(0?[1-9]|[12][0-9]|3[01])[\/\-
](0?[1-9]|1[012])[\/\-]\d{4}$/;
            var dateformatjdate = /^(0?[1-9]|[12][0-9]|3[01])[\/\-
](0?[1-9]|1[012])[\/\-]\d{4}$/;
            var salaryformat=/^\d{1,6}(?:\.\d{0,2})?$/
            var name=document.getElementById("name").value;
            var dob=document.getElementById("dob").value;
            var jdate=document.getElementById("jdate").value;
            var salary=document.getElementById("salary").value;

            if(!regName.test(name))
                alert("invalid name is given");
            if(!dateformatjdate.test(jdate))
                alert("invalid joining date is given");
            if(!dateformatdob.test(dob))
                alert("invalid date of birth is given");
            if(!salaryformat.test(salary))
                alert("invalid salary");
        }
        </script>
    </head>
<body>
    <form>
        <h1>Employee Rsgistration Details</h1>
            employee name :
            <input type="text" name="fname" id="name"><br>
            date of birth :
            <input type="text" name="dob" id="dob"><br>
            joining date :
            <input type="text" name="jdate" id="jdate"><br>
            salary :
            <input type="text" name="salary" id="salary"><br>
            <input type="button" value="validate"
onclick="validate()">
    </form>
</body>
```

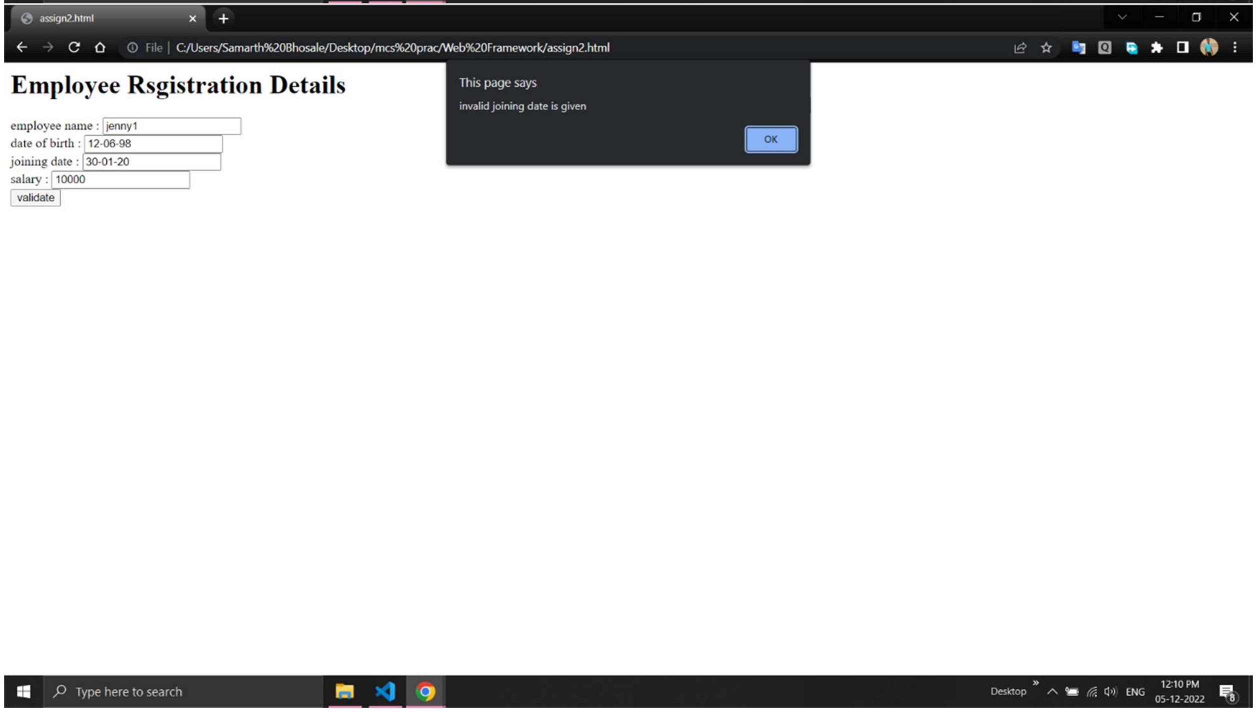
```
</html>
```

//Output:


Employee Rsgistration Details

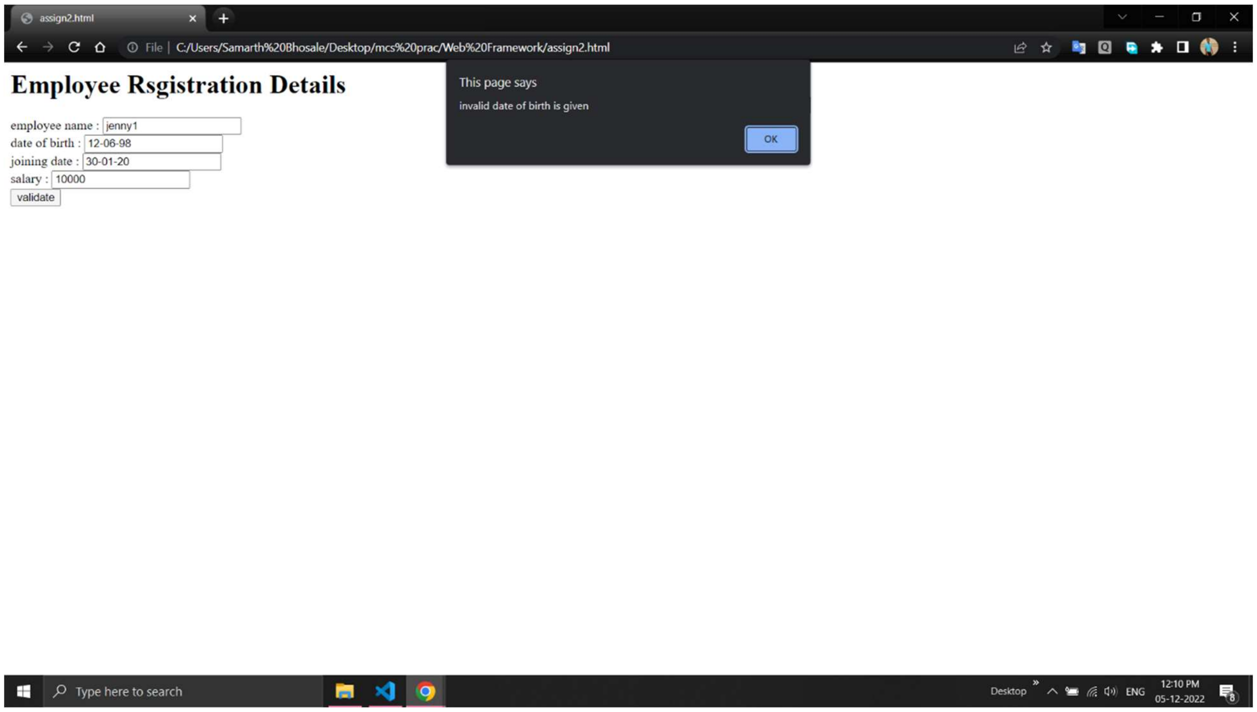
employee name : jenny1
date of birth : 12-06-98
joining date : 30-01-20
salary : 10000
validate

This page says
invalid name is given
OK


Employee Rsgistration Details

employee name : jenny1
date of birth : 12-06-98
joining date : 30-01-20
salary : 10000
validate

This page says
invalid joining date is given
OK



assign2.html

C:/Users/Samarth%20Bhosale/Desktop/mcs%20prac/Web%20Framework/assign2.html

Employee Rsgistration Details

employee name : jenny1
date of birth : 12-06-98
joining date : 30-01-20
salary : 10000

validate

This page says

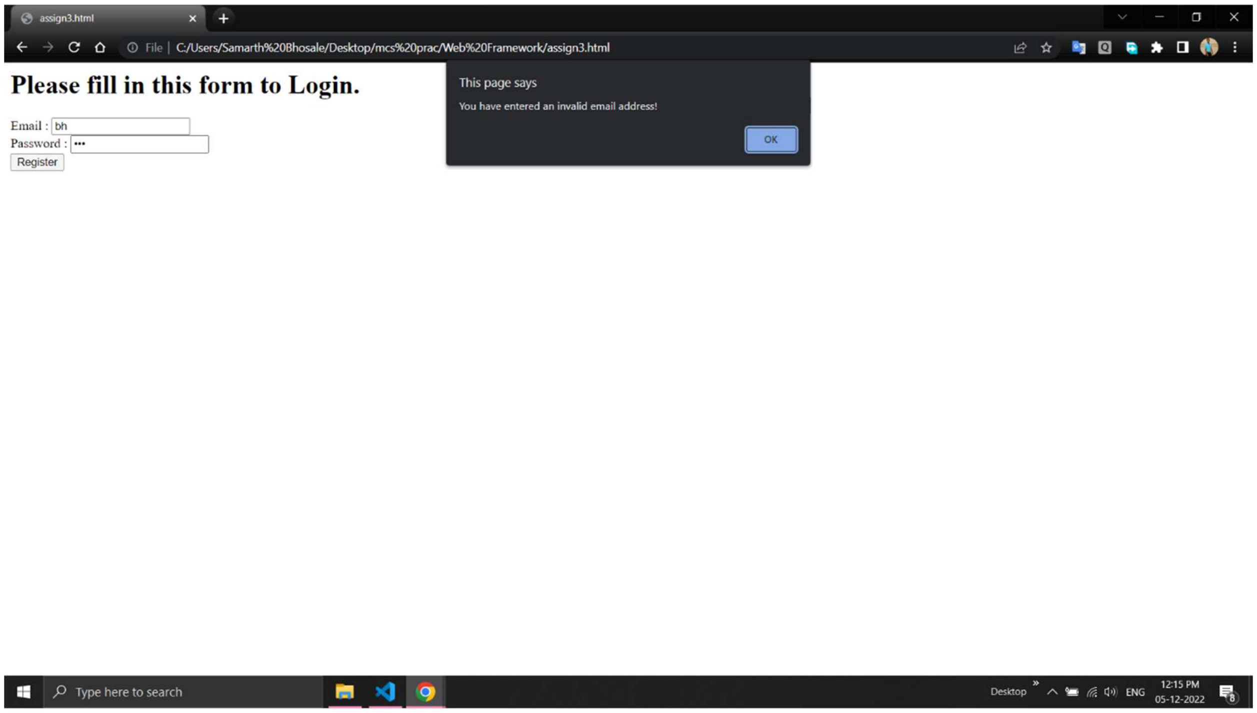
invalid date of birth is given

OK

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

```
<html>
<head>
  <script>
    function validateform(){
      var email = document.getElementById("email").value;
      var password = document.getElementById("psw").value;
      if (!(/^\w+([\.-]?\w+)*@\w+([\.-
]?\w+)*(\.\w{2,3})+$/.test(email)))
          alert("You have entered an invalid email address!");
    }
    </script>
</head>
<body>
  <form name="myform" onsubmit="return validateform()">
      <h1>Please fill in this form to Login.</h1>

      Email :
      <input type="text" autocomplete="off" placeholder="Enter Email"
name="email" id="email" required><br>
      Password :
      <input type="password" autocomplete="off" placeholder="Enter
Password" name="psw" id="psw" required><br>
      <button type="submit" class="registerbtn">Register</button>
  </form>
</body>
</html>
```

//Output:


assign3.html
File | C:/Users/Samarth%20Bhosale/Desktop/mcs%20prac/Web%20Framework/assign3.html

Please fill in this form to Login.

Email : bh
Password : •••
Register

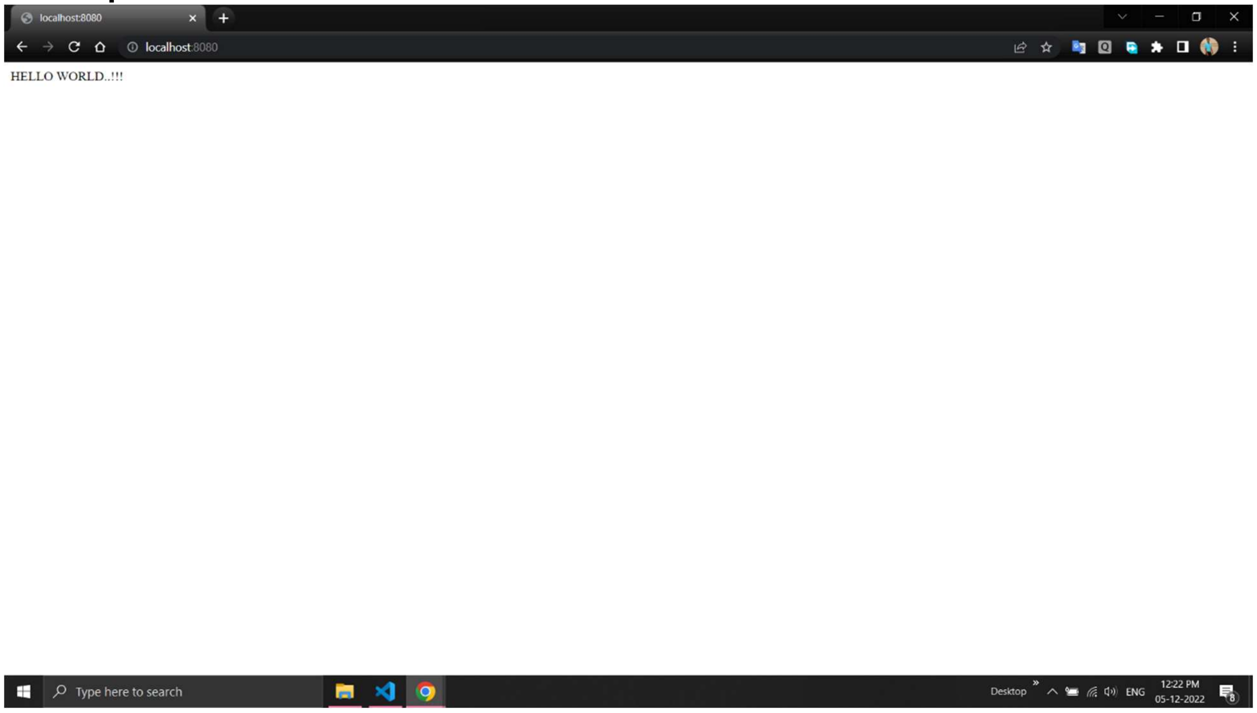
This page says
You have entered an invalid email address!
OK

Type here to search
Desktop
ENG
12:15 PM
05-12-2022

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

```
var http = require('http');
var uc = require('upper-case');
http.createServer(function (req, res){
    res.writeHead(200, {'Content-Type': 'text/html'});
    res.write(uc.upperCase("hello world..!!!"));
    res.end();
}).listen(8080);
```

//Output:

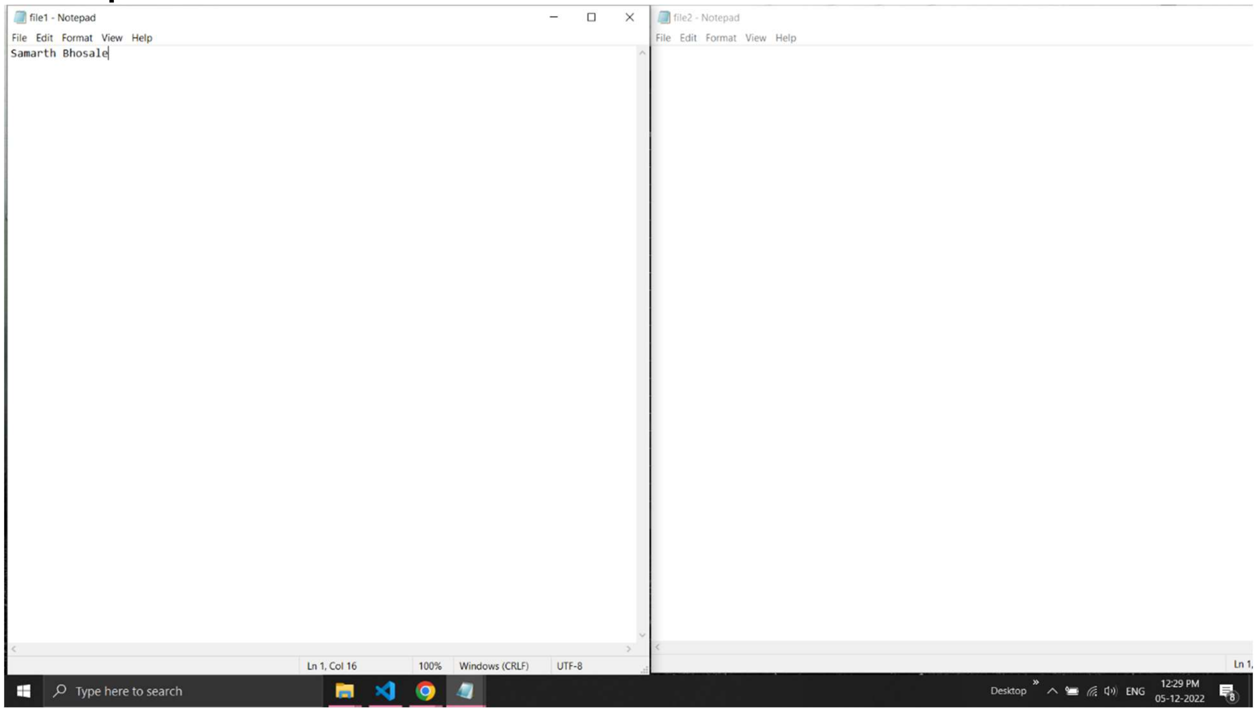


```
HELLO WORLD..!!!
```

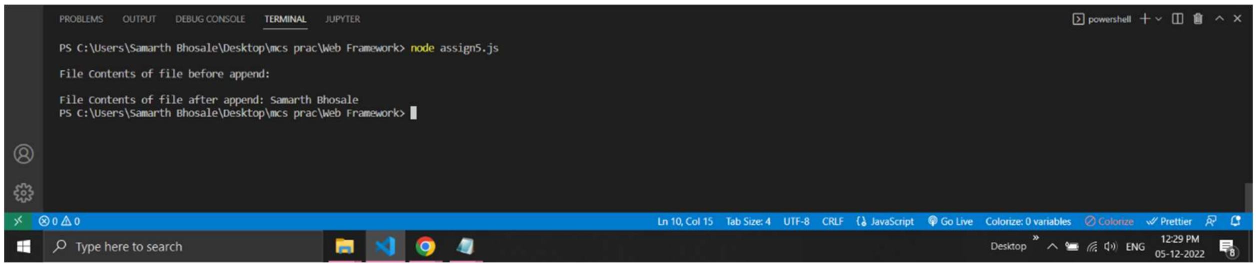
5. Using Node.js create a web page to read two file names from user and append contents of first file into second file.

```
var fs = require('fs');
console.log("\nFile Contents of file before append:");
var a = fs.readFileSync("file1.txt", "utf8");
fs.appendFile("file2.txt", a, function(err){
    if (err)
        console.log(err);
    else {
        console.log("\nFile Contents of file after append:",
        fs.readFileSync("file2.txt", "utf8"));
    }
});
```

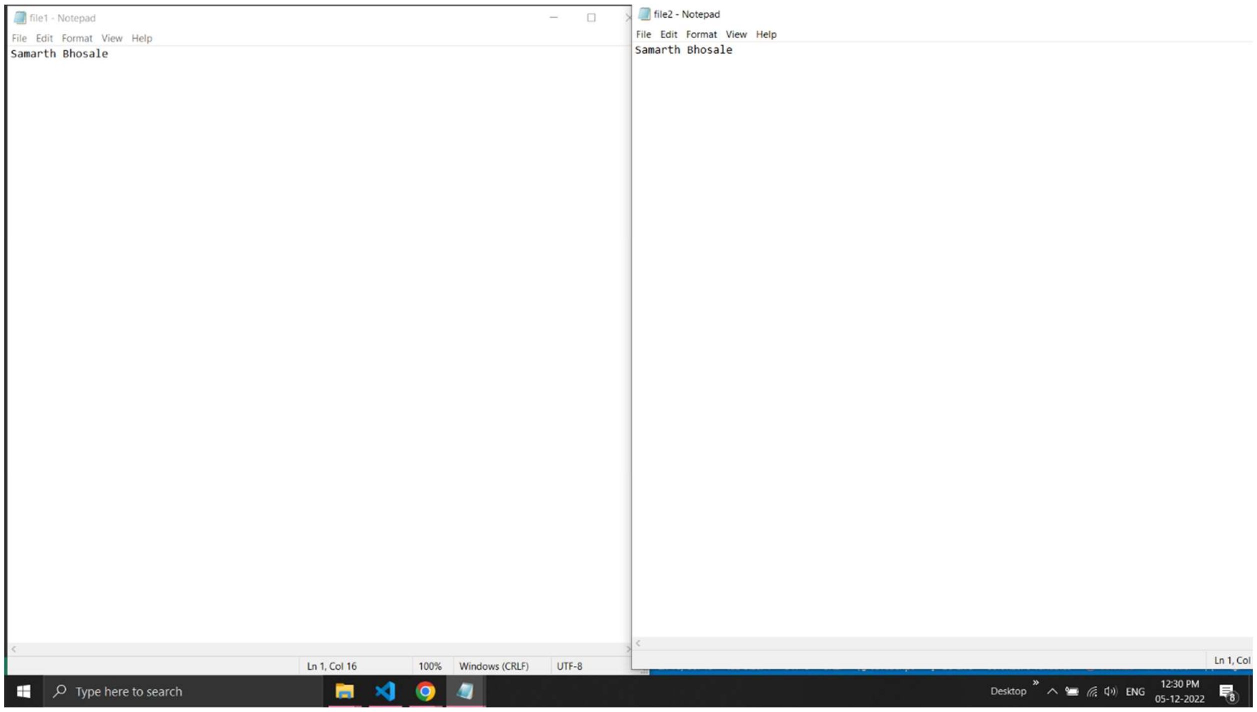
//Output:



```
Samarth Bhosale
```



```
PS C:\Users\Samarth Bhosale\Desktop\mcs prac\Web Framework> node assign5.js

File Contents of file before append:

File Contents of file after append: Samarth Bhosale
PS C:\Users\Samarth Bhosale\Desktop\mcs prac\Web Framework>
```



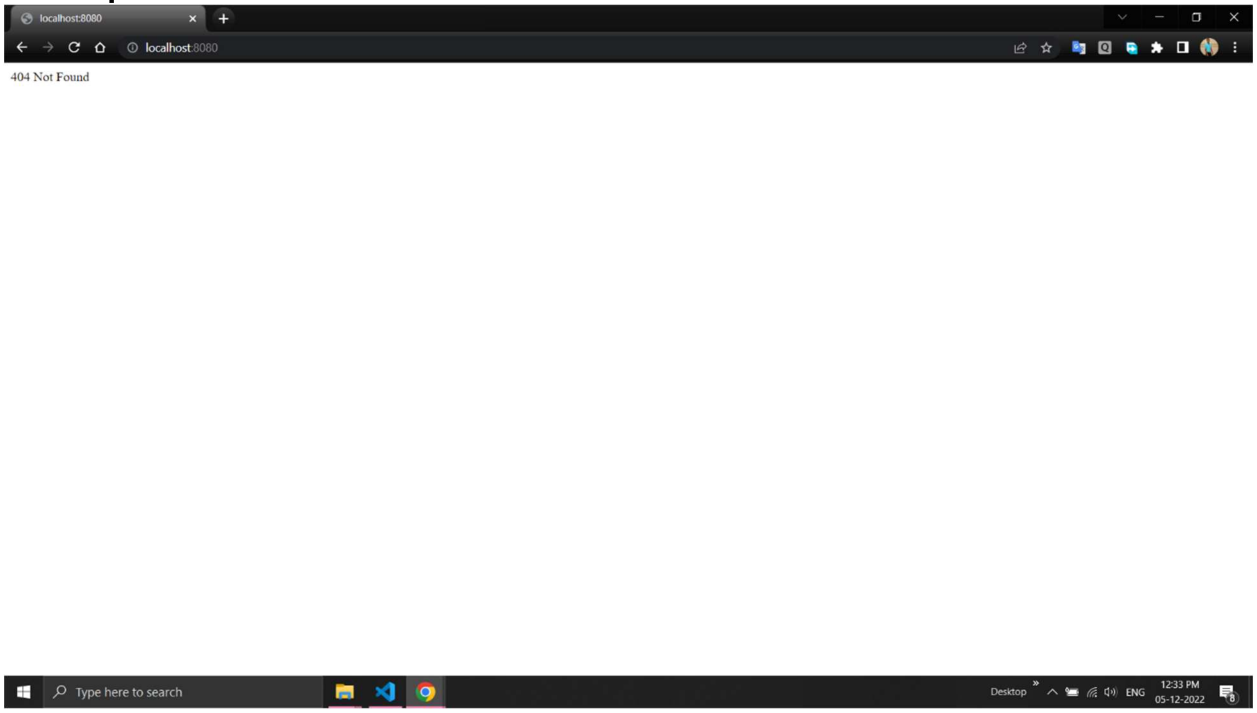
```
Samarth Bhosale
```

```
Samarth Bhosale
```

6. 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.

```
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);
```

//Output:

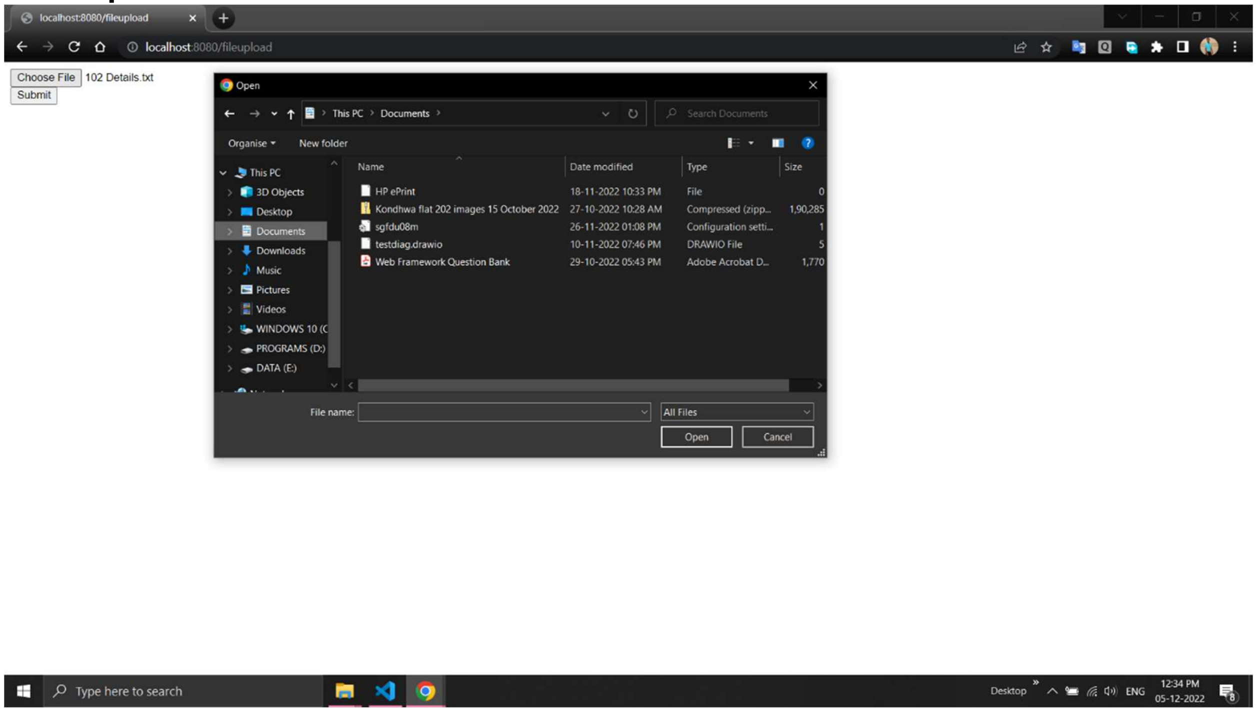


```
404 Not Found
```

7. Create a Node.js file that writes an HTML form, with an upload field.

```
var http = require('http');
http.createServer(function (req, res) {
  res.writeHead(200, {'Content-Type': 'text/html'});
  res.write('<form action="fileupload" method="post"
enctype="multipart/form-data">');
  res.write('<input type="file" name="filetoupload"><br>');
  res.write('<input type="submit">');
  res.write('</form>');
  return res.end();
}).listen(8080);
```

//Output:

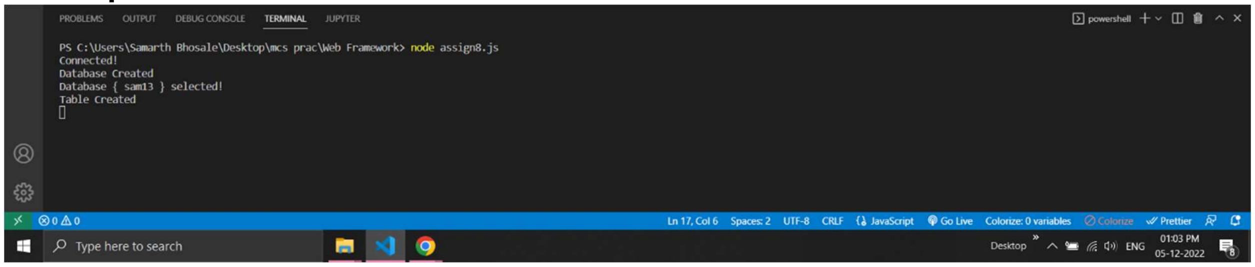


Name	Date modified	Type	Size
HP ePrint	18-11-2022 10:33 PM	File	0
Kondhwa flat 202 images 15 October 2022	27-10-2022 10:28 AM	Compressed (zipp...	1,90,285
sgfdu08m	26-11-2022 01:08 PM	Configuration setti...	1
testdiag.drawio	10-11-2022 07:46 PM	DRAWIO File	5
Web Framework Question Bank	29-10-2022 05:43 PM	Adobe Acrobat D...	1,770

8. Create a Node.js file that demonstrate create database and table in MySQL.

```
var mysql = require('mysql');
var con = mysql.createConnection({
  host: "localhost",
  user: "root",
  password: "",
  database: "sam"
});

con.connect(function(err) {
  if (err) throw err;
  else
    console.log("Connected!");
  con.query("create database sam13", function (err, result) {
    if (err)
    console.log(err);
    console.log("Database Created");
  });
});

con.query("use sam13",function(err){
  if(err)
    console.log(err);
  else
    console.log("Database { "+"sam13 } selected!");
});

var sql = "create table customer1(name varchar(10), address
varchar(10))";
con.query(sql, function (err, result) {
  if (err)
    console.log(err);
  else
    console.log("Table Created");
});
```

//Output:

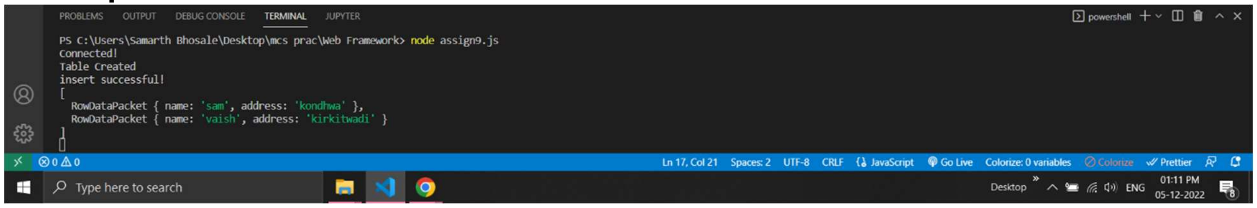


```
PS C:\Users\Samarth Bhosale\Desktop\mcs prac\Web Framework> node assign8.js
Connected!
Database Created
Database { sam13 } selected!
Table Created
```

9. Create a node.js file that Select all records from the "customers" table, and display the result object on console.

```
var mysql = require('mysql');
var con = mysql.createConnection({
  host: 'localhost',
  user: "root",
  password: "",
  database:'sam'
});

con.connect(function(err) {
  if (err) throw err;
  else
    console.log("Connected!");
});

con.query('select * from customer1', function(err,rows){
  if(err) throw err;
  else
    console.log(rows);
});
```

//Output:

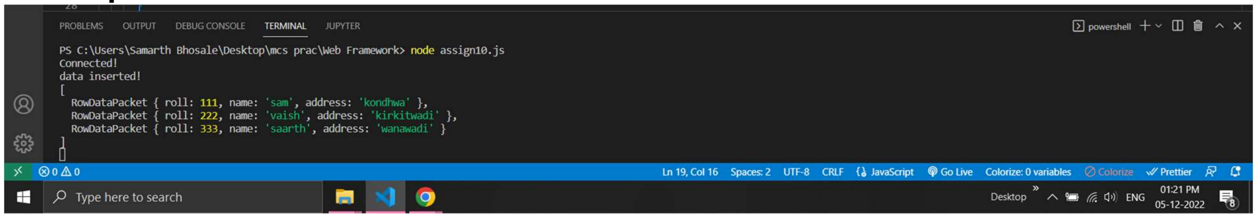


```
PS C:\Users\Samarth Bhosale\Desktop\mcs prac\Web Framework> node assign9.js
Connected!
Table Created
insert successful!
[
  RowDataPacket { name: 'sam', address: 'kondhwa' },
  RowDataPacket { name: 'vaish', address: 'kirkitwadi' }
]
```

10. Create a node.js file that Insert Multiple Records in "student" table and display the result object on console.

```
var mysql = require('mysql');
var con = mysql.createConnection({
host: "localhost",
user: "root",
password: "",
database: "sam"
});
con.connect(function(err) {
  if (err) throw err;
  else{
    console.log("Connected!");

    con.query("create table students1(roll int primary key, name text,
address text)",function(err){
      if(err) throw err;
      else{
        con.query("insert into students1
values(111,'sam','kondhwa'),(222,'vaish','kirkitwadi'),(333,'saarth','
wanawadi')",function(err){
          if(err) throw err;
          else{
            console.log("data inserted!");
            con.query("select * from students", function (err, result)
{
              if (err) throw err;
              else
                console.log(result);
            });
          }
        });
      }
    });
  }
});
```

//Output:

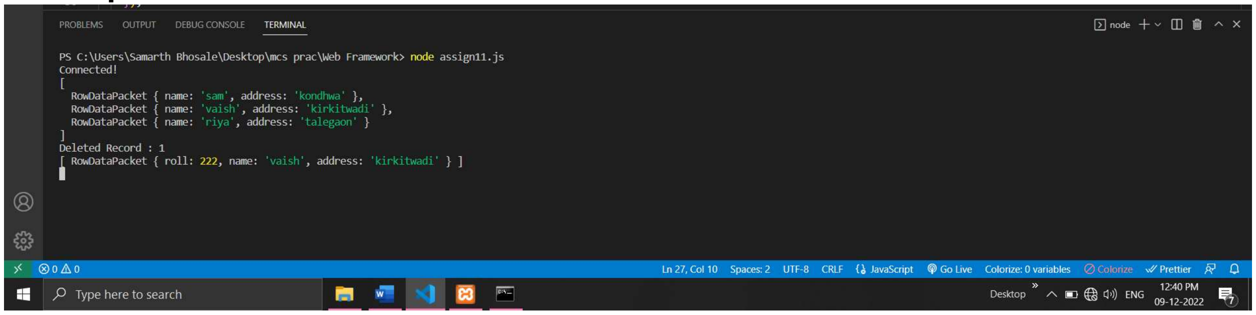


```
PS C:\Users\Samarth Bhosale\Desktop\mcs prac\Web Framework> node assign10.js
Connected!
data inserted!
[
  RowDataPacket { roll: 111, name: 'sam', address: 'kondhwa' },
  RowDataPacket { roll: 222, name: 'vaish', address: 'kirkitwadi' },
  RowDataPacket { roll: 333, name: 'saarth', address: 'wanawadi' }
]
```

11. Create a node.js file that Select all records from the "customers" table, and delete the specified record.

```
var mysql = require('mysql');
var con = mysql.createConnection({
  host: "localhost",
  user: "root",
  password: "",
  database: "sam"
});

con.connect(function(err) {
  if (err) throw err;
  else{
    console.log("Connected!");
    con.query("select * from customer1", function (err, result) {
      if (err) throw err;
      else{
        console.log(result);
        con.query("delete from customer1 where name = 'riya'", function (err,
result){
          if (err) throw err;
          else{
            console.log("Deleted Record : " + result.affectedRows);
            con.query("select * from students1", function (err, result) {
              if (err) throw err;
              else
                console.log(result);
            });
        }
        });
      }
    });
      }
  });
```

//Output:

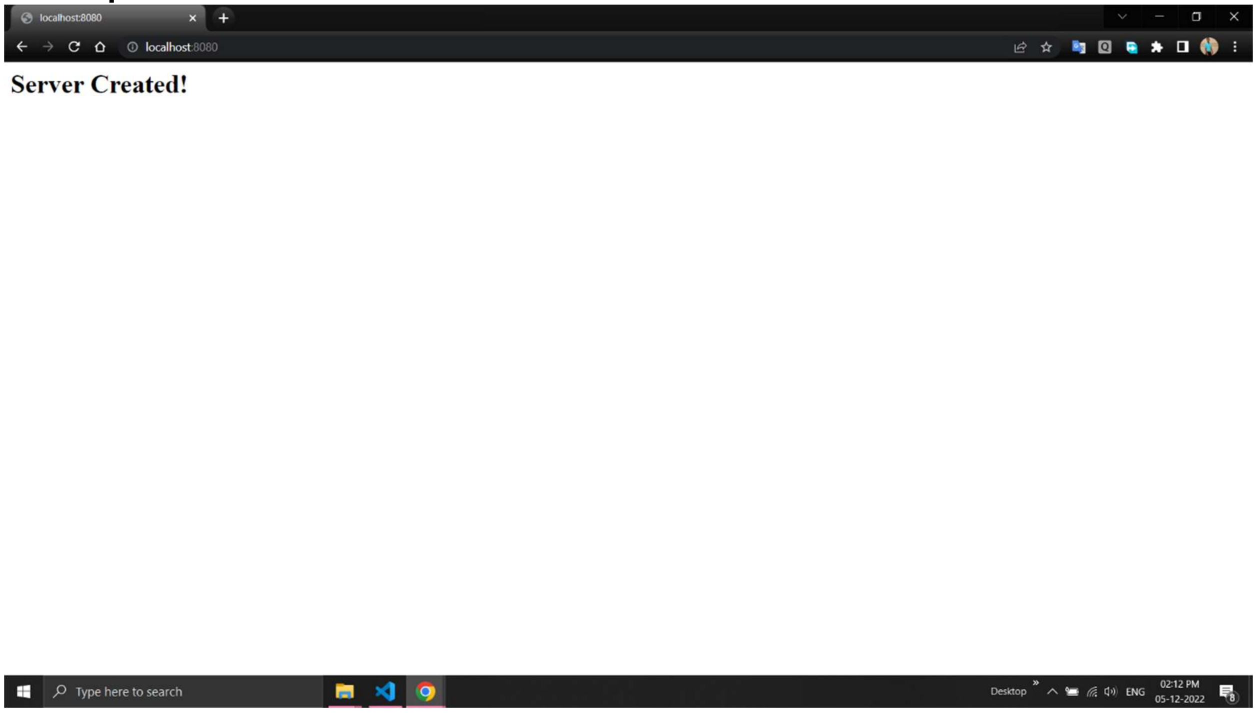


```
PS C:\Users\Samarth Bhosale\Desktop\mcs prac\Web Framework> node assign11.js
Connected!
[
  RowDataPacket { name: 'sam', address: 'kondhwa' },
  RowDataPacket { name: 'vaish', address: 'kirkitwadi' },
  RowDataPacket { name: 'riya', address: 'talegaon' }
]
Deleted Record : 1
[ RowDataPacket { roll: 222, name: 'vaish', address: 'kirkitwadi' } ]
```

12. Create a Simple Web Server using node js.

```
var http = require('http');
var server = http.createServer(function (req, res) {
    res.write("<h1>Server Created!</h1>");
});
server.listen(8080);
```

//Output:



Server Created!

13. Using node js create a User Login System.

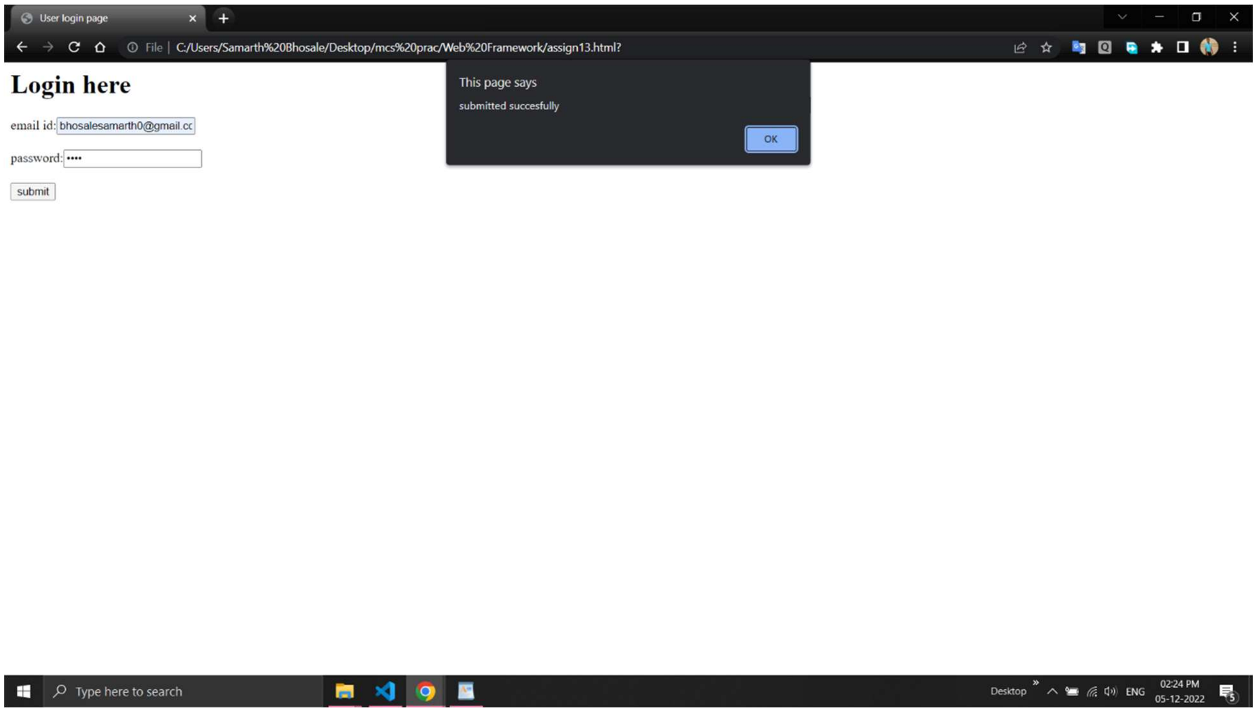
html-

```
<html>
<head>
<title>User login page</title>
<head>
    <script>
          function f(){
                var validRegex =/^[a-zA-Z0-9.!#$%&'+/=?^_`{|}~-]+@[a-
zA-Z0-9-]+(?:\.[a-zA-Z0-9-]+)$/;
                var email=document.getElementById("email").value;
                if(!validRegex.test(email))
                    alert("Invalid Email!");
                 else
                    alert("submitted succesfully");
                return false;
         }
    </script>
</head>
<body>
    <form name="login" onsubmit="f()">
    <h1>Login here</h1>
    email id:<input type="text" id="email"/><br><br>
    password:<input type="password" id="password"><br><br>
    <input type="submit" id="submit" value="submit">
    </form>
</body>
</html>
```

javascript-

```
var http=require('http');
http.createServer(function(req,resp){
    var fs=require("fs");
    resp.writeHead(200,{'content-type':'text/html'});
     var content= fs.readFileSync("login.html");
         if(content){

         resp.write(content);
         }
         else{
            resp.write("404 error");
         }

    resp.end();
}).listen(6006);
```

//Output:



User login page

C:/Users/Samarth%20Bhosale/Desktop/mcs%20prac/Web%20Framework/assign13.html?

Login here

email id: bhosalesamarth0@gmail.cc

password: ••••

submit

This page says

submitted succesfully

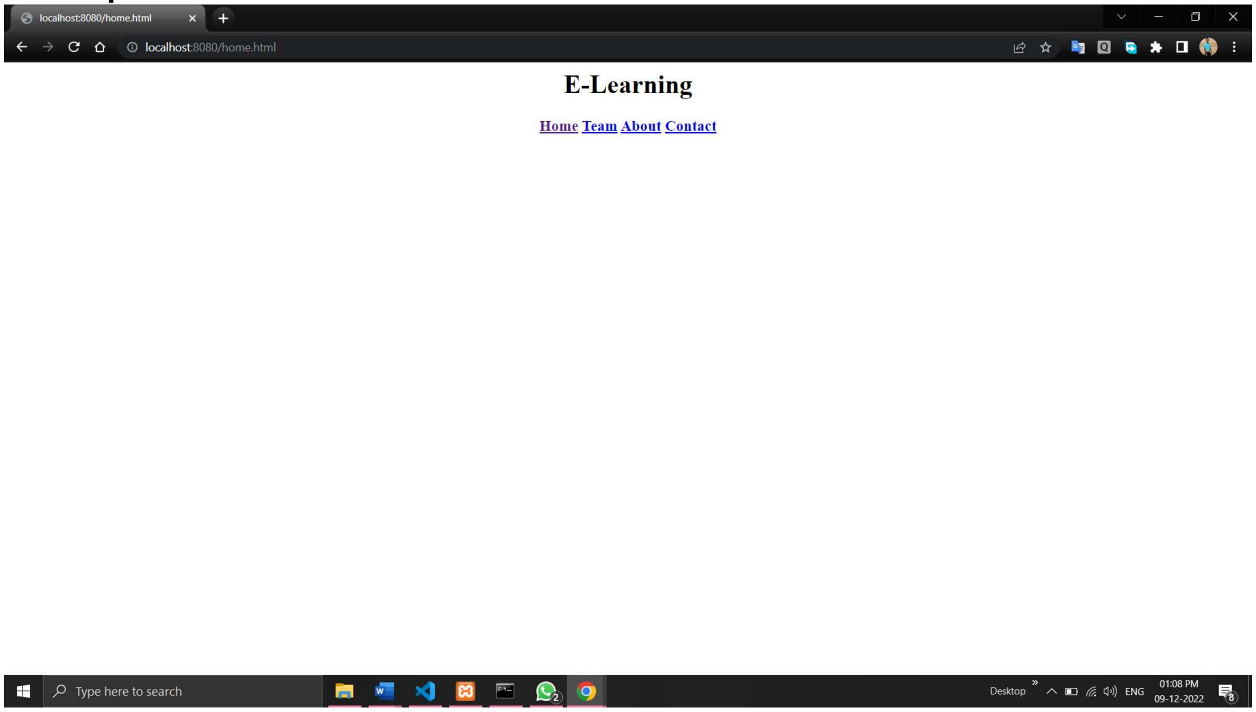
OK

14. Using node js create an eLearning System.

html –
```
<html>
<head>
</head>
<body>
    <center>
    <h1>E-Learning</h1>

    <h3>
        <a href = "home.html">Home</a>
        <a href = "team.html">Team</a>
        <a href = "about.html">About</a>
        <a href = "contact.html">Contact</a>
    </h3>
    </center>
</body>
</html>
```

javascript –
```
var fs=require("fs");
var http = require('http');
http.createServer(function(req,resp){
    resp.writeHead(200,{"content-type":"text/html"});
    var content=fs.readFileSync("elearningnew.html");
    if(content)
        resp.write(content);
    else
        resp.write("404 error");
    resp.end()
}).listen(8080);
```

//Output:



E-Learning

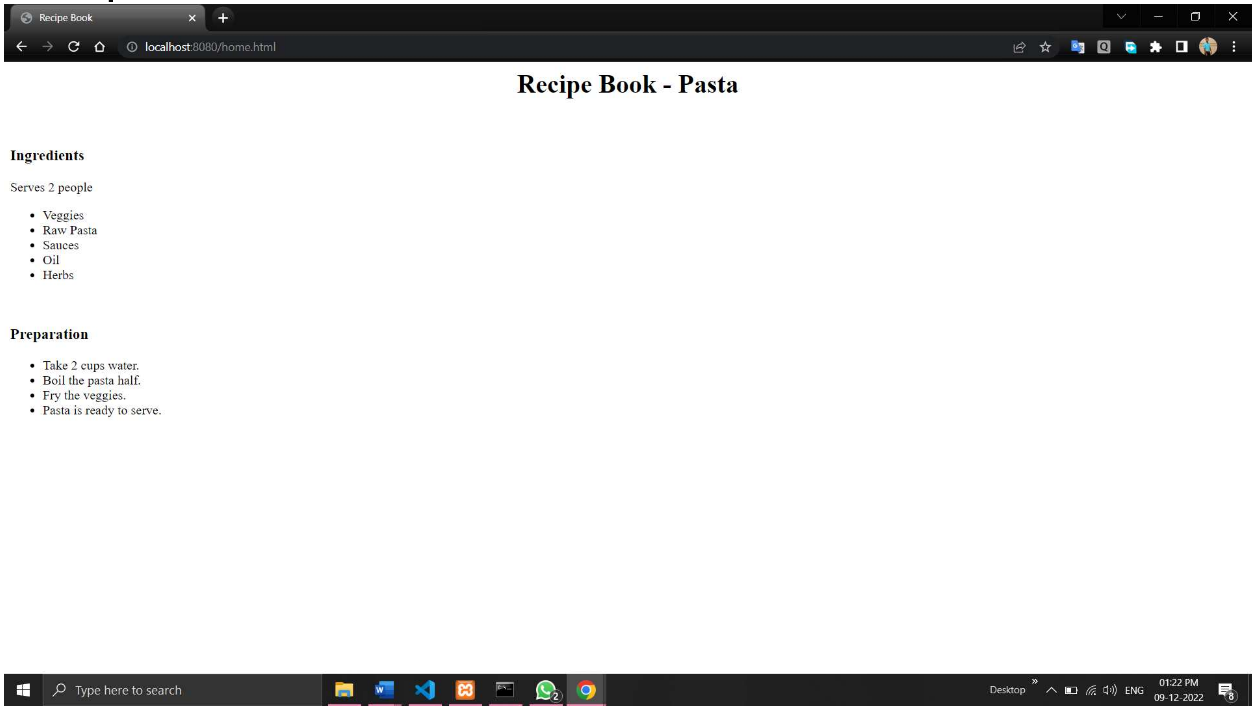
Home Team About Contact

15. Using node js create a Recipe Book.

html –
```
<html>
<head>
    <title>Recipe Book</title>
</head>
<body>
    <center>
    <h1>Recipe Book - Pasta</h1><br>
    </center>
    <h3>Ingredients</h3>
    <p>Serves 2 people</p>
    <ul>
        <li>Veggies</li>
        <li>Raw Pasta</li>
        <li>Sauces</li>
        <li>Oil</li>
        <li>Herbs</li>
    </ul>
    <br>
    <h3>Preparation</h3>
    <ul>
        <li>Take 2 cups water.</li>
        <li>Boil the pasta half.</li>
        <li>Fry the veggies.</li>
        <li>Pasta is ready to serve.</li>
    </ul>

</body>
</html>
```

Javascript –
```
var fs=require("fs");
var http = require('http');
http.createServer(function(req,resp){
    resp.writeHead(200,{"content-type":"text/html"});
    var content=fs.readFileSync("recipenew.html");
    if(content)
        resp.write(content);
    else
        resp.write("404 error");
    resp.end()
}).listen(8080);
```

//Output:



Recipe Book

localhost:8080/home.html

Recipe Book - Pasta

Ingredients

Serves 2 people

- Veggies
- Raw Pasta
- Sauces
- Oil
- Herbs

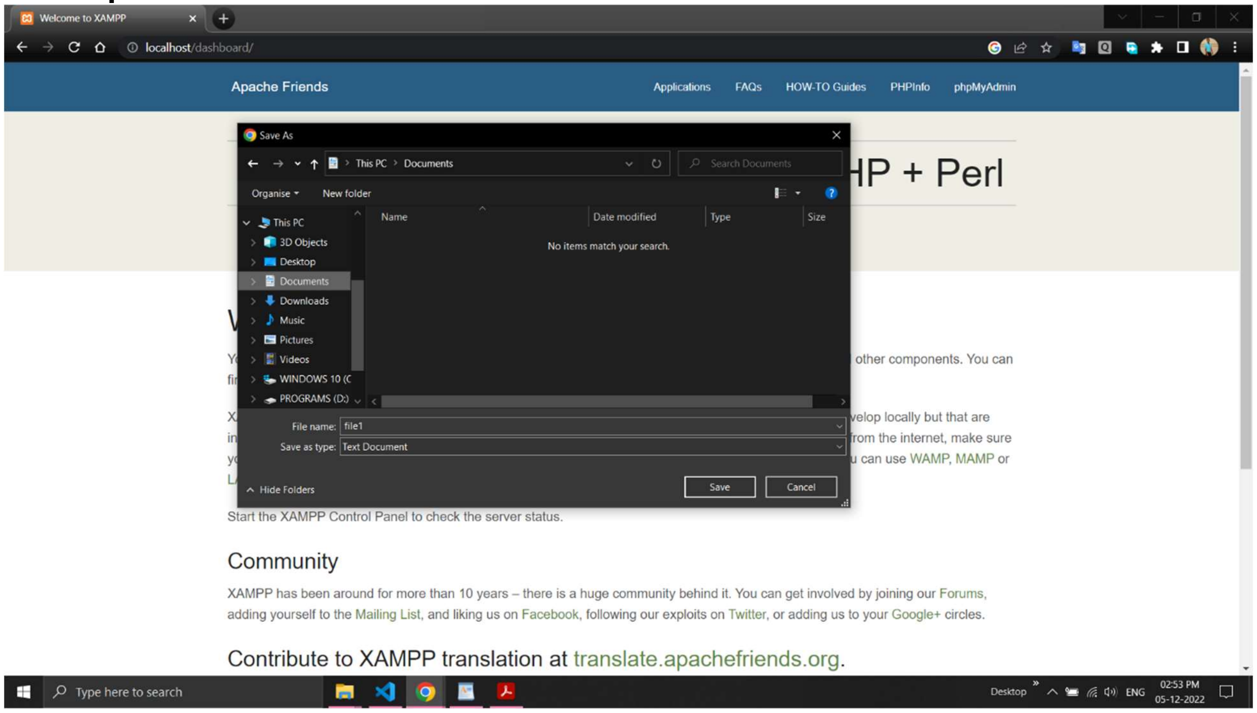
Preparation

- Take 2 cups water.
- Boil the pasta half.
- Fry the veggies.
- Pasta is ready to serve.

16. Write node js script to interact with the filesystem, and serve a web page from a file.

```
var express = require('express');
var app = express();
var PORT = 3000;

app.get('/', function(req, res){
    res.download('hello.txt');
});

app.listen(PORT, function(err){
    if (err) console.log(err);
    console.log("Server listening on PORT", PORT);
});
```

//Output:



17. Write node js script to build Your Own Node.js Module. Use require (‘http’) module is a built-in Node module that invokes the functionality of the HTTP library to create a local server. Also use the export statement to make functions in your module available externally. Create a new text file to contain the functions in your module called, “modules.js” and add this function to return today’s date and time.

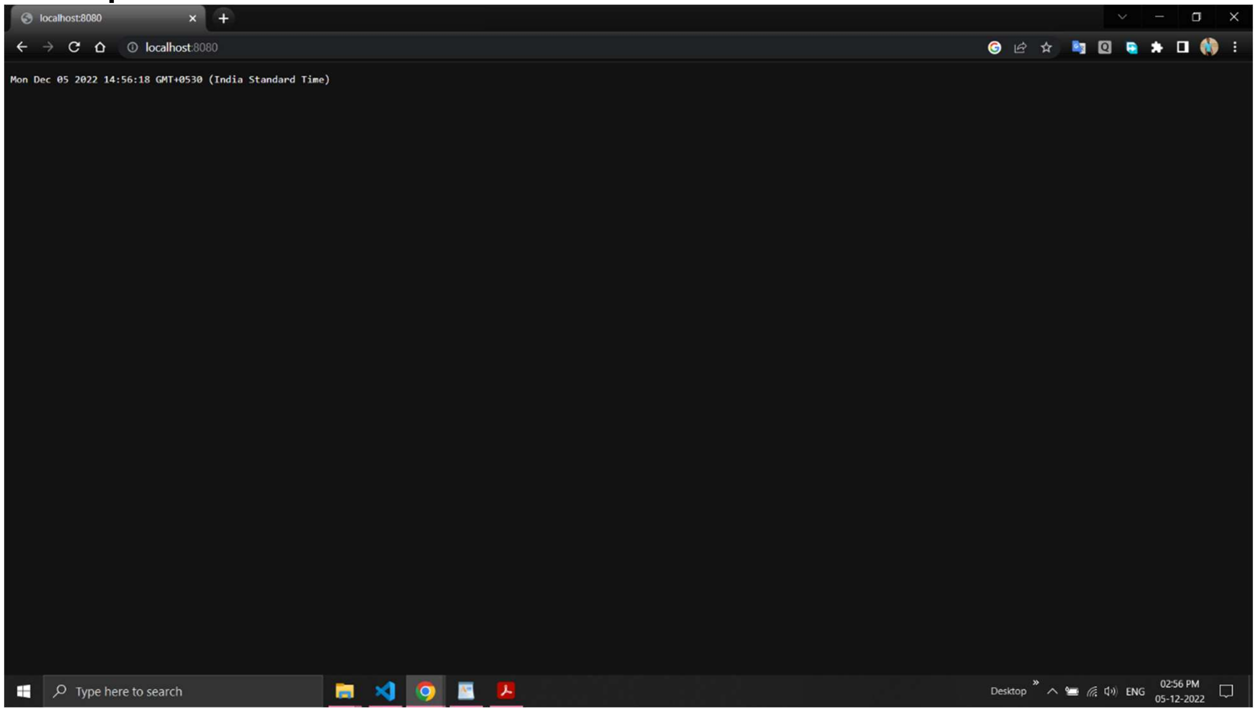
Modules.js –

```
module.exports.dt= new Date();
```

date.js -

```
var http = require('http');
var dt = require('./Modules');

http.createServer(function (req, res) {
  res.writeHead(200, {'Content-Type': 'text/html'});
  res.write("The date and time are currently: " + dt.myDateTime());
  res.end();
}).listen(8080);
```

//Output:

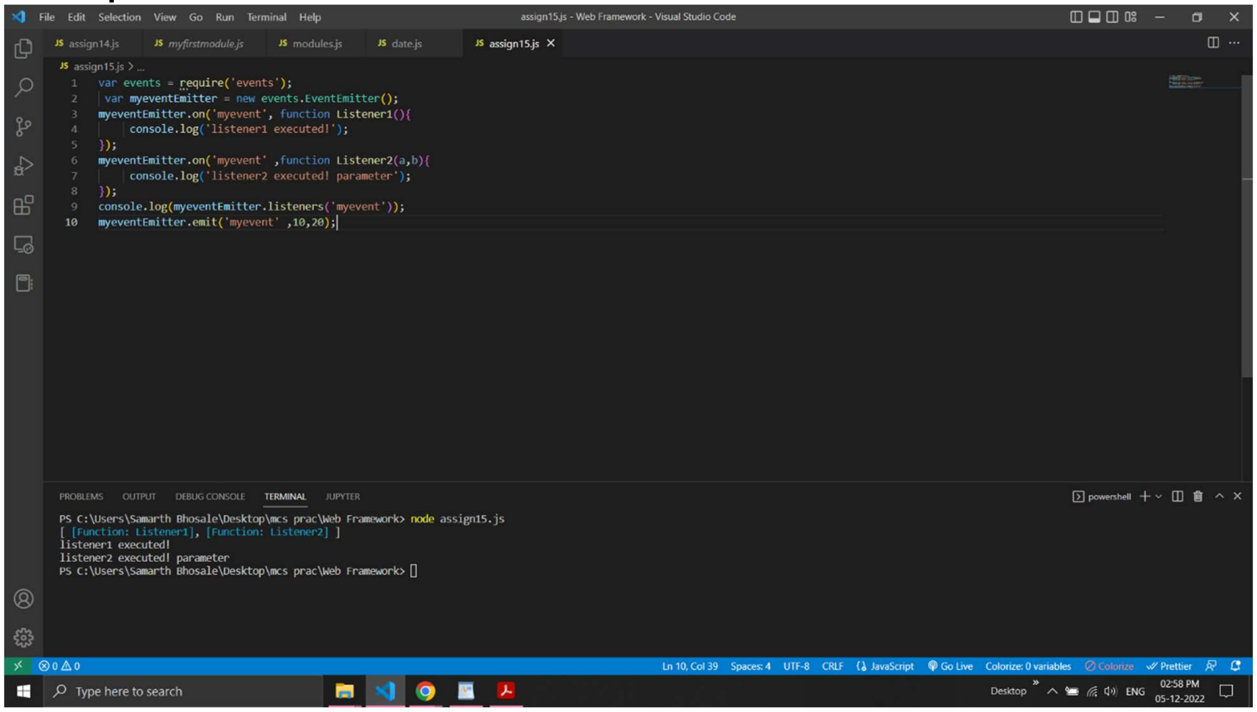


```
Mon Dec 05 2022 14:56:18 GMT+0530 (India Standard Time)
```

18. Create a js file named main.js for event-driven application. There should be a main loop that listens for events, and then triggers a callback function when one of those events is detected.

```
var events = require('events');
var myeventEmitter = new events.EventEmitter();
myeventEmitter.on('myevent', function Listener1(){
     console.log('listener1 executed!');
});
myeventEmitter.on('myevent' ,function Listener2(a,b){
     console.log('listener2 executed! parameter');
});
console.log(myeventEmitter.listeners('myevent'));
myeventEmitter.emit('myevent' ,10,20);
```

//Output:



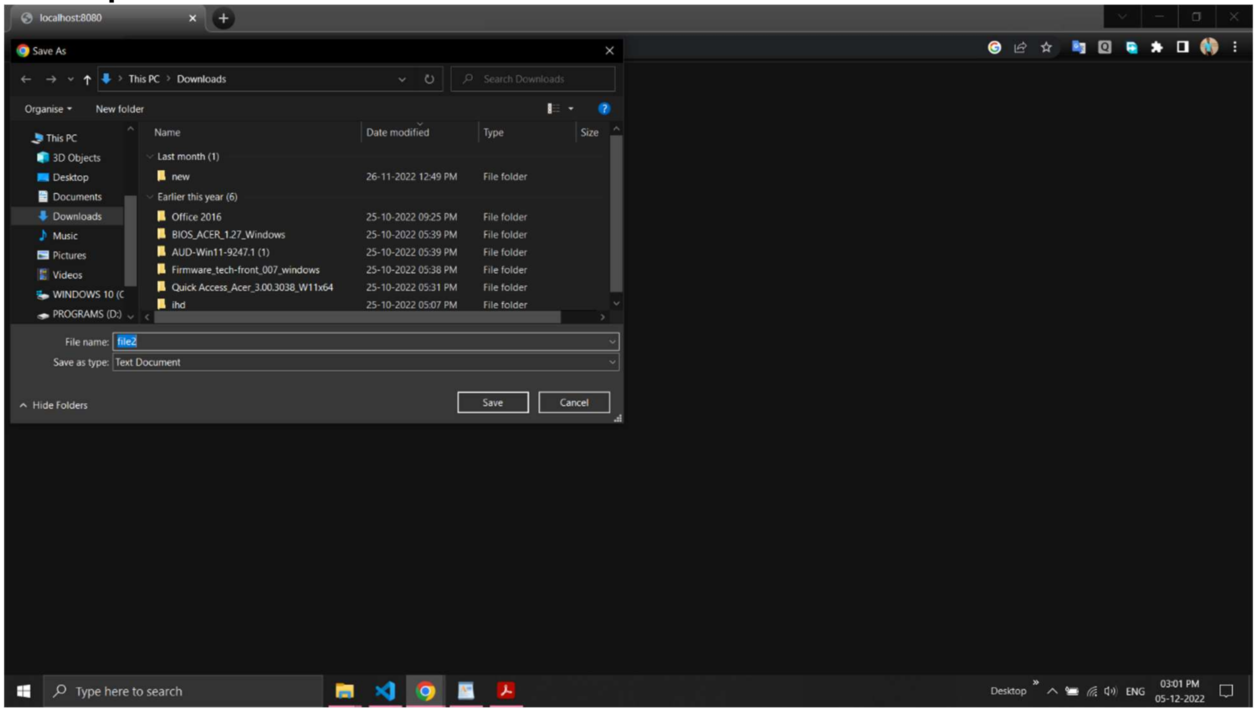
```
var events = require('events');
 var myeventEmitter = new events.EventEmitter();
myeventEmitter.on('myevent', function Listener1(){
    console.log('listener1 executed!');
});
myeventEmitter.on('myevent' ,function Listener2(a,b){
    console.log('listener2 executed! parameter');
});
console.log(myeventEmitter.listeners('myevent'));
myeventEmitter.emit('myevent' ,10,20);
```

```
PS C:\Users\Samarth Bhosale\Desktop\mcs prac\Web Framework> node assign15.js
[ [Function: Listener1], [Function: Listener2] ]
listener1 executed!
listener2 executed! parameter
PS C:\Users\Samarth Bhosale\Desktop\mcs prac\Web Framework> 
```

19. Write node js application that transfer a file as an attachment on web and enables browser to prompt the user to download file using express js.

```
var express = require("express");
var app = express();
app.get('/a/',function(req,res){
    res.download('file2.txt');
});
app.listen(8051,function(err){
    if(err)
    console.log(err);
    console.log("Server is listening..");
});
```

//Output:



Name	Date modified	Type	Size
Last month (1)			
new	26-11-2022 12:49 PM	File folder	
Earlier this year (6)			
Office 2016	25-10-2022 09:25 PM	File folder	
BIOS_ACER_1.27_Windows	25-10-2022 05:39 PM	File folder	
AUD-Win11-9247.1 (1)	25-10-2022 05:39 PM	File folder	
Firmware_tech-front_007_windows	25-10-2022 05:38 PM	File folder	
Quick Access_Acer_3.00.3038_W11x64	25-10-2022 05:31 PM	File folder	
ihd	25-10-2022 05:07 PM	File folder	

File name: file2
Save as type: Text Document

20.Create your Django app in which after running the server, you should see on the browser, the text “Hello! I am learning Django”, which you defined in the index view.

Views.py -

```
# -*- coding: utf-8 -*-
from __future__ import unicode_literals
from django.shortcuts import render
from django.http import HttpResponse
# Create your views here.
def index(req):
   return render(req,"m.html")
```

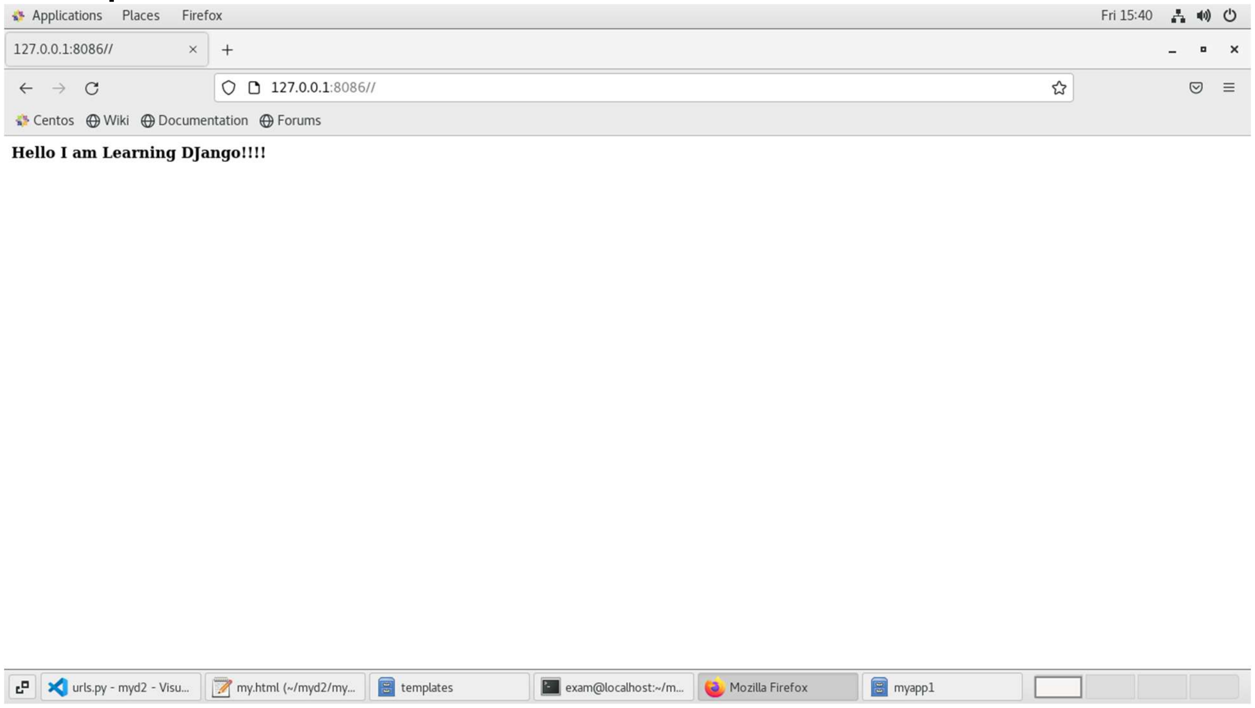
urls.py -

```
"""myproj URL Configuration
The `urlpatterns` list routes URLs to views. For more information
please see:
    https://docs.djangoproject.com/en/1.11/topics/http/urls/
Examples:
Function views
    1. Add an import:  from my_app import views
    2. Add a URL to urlpatterns:  url(r'^$', views.home, name='home')
Class-based views
    1. Add an import:  from other_app.views import Home
    2. Add a URL to urlpatterns:  url(r'^$', Home.as_view(),
name='home')
Including another URLconf
    1. Import the include() function: from django.conf.urls import
url, include
    2. Add a URL to urlpatterns:  url(r'^blog/', include('blog.urls'))
"""
from django.conf.urls import url
from django.contrib import admin

from myapp1.views import index
urlpatterns = [
    url(r'^admin/', admin.site.urls),
    url("/",index),
]
```

m.html -

```
<html>
<body>
<b> Hello I am Learning Django</b>
</body>
</html>
```

//Output -



```
Hello I am Learning DJango!!!!
```

21.Design a Django application that adds web pages with views and templates.

views.py -

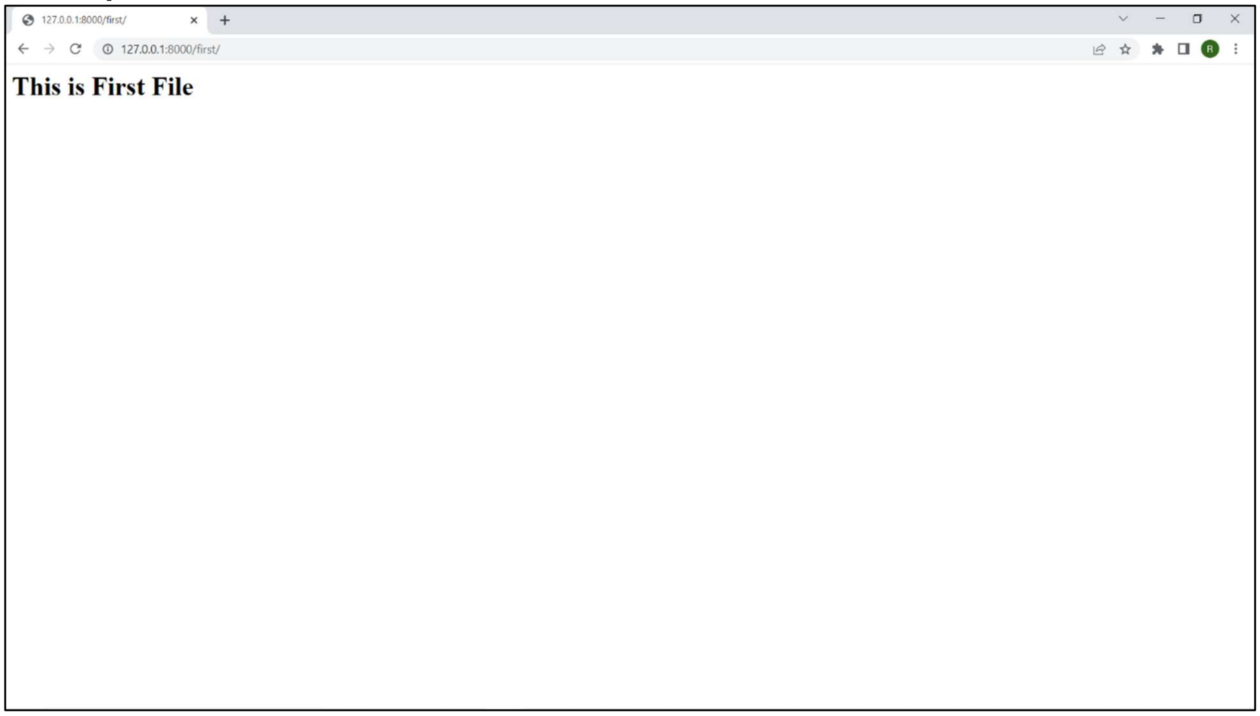
```
from django.shortcuts import render
from django.http import HttpResponse

def f1(req):
	return render(req,"a.html")
def f2(req):
	return render(req,"b.html")
def f3(req):
	return render(req,"c.html")
```

urls.py -

```
from django.contrib import admin
from django.urls import path
from views.views import f1
from views.views import f2
from views.views import f3
```

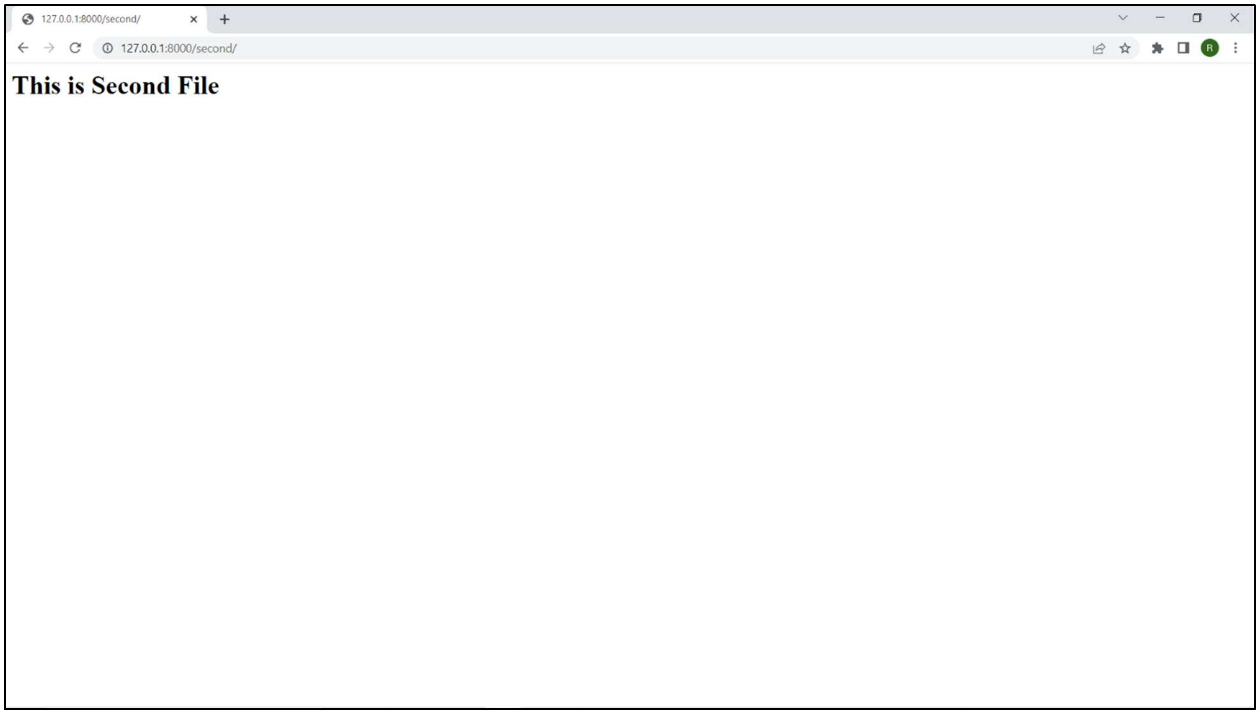
```
urlpatterns = [
    path('admin/', admin.site.urls),
      path('first/',f1),
      path('second/',f2),
      path('third/',f3),
]
```

//Output-



```
127.0.0.1:8000/first/
```

This is First File



```
127.0.0.1:8000/second/
```

This is Second File

22.Develop a basic poll application (app).It should consist of two parts: a) A public site in which user can pick their favourite programming language and vote. b) An admin site that lets you add, change and delete programming languages.

models.py -

```
from django.db import models

class Question(models.Model):
    question_text = models.CharField(max_length = 200)
    pub_date = models.DateTimeField('date published')

    def __str__(self):
        return self.question_text

  class Choice(models.Model):
    question = models.ForeignKey(Question, on_delete = models.CASCADE)
    choice_text = models.CharField(max_length = 200)
    votes = models.IntegerField(default = 0)

    def __str__(self):
        return self.choice_text
```

views.py -

```
from django.template import loader
from django.http import HttpResponse, HttpResponseRedirect
from django.shortcuts import get_object_or_404, render,Http404
from django.urls import reverse
from .models import Question, Choice

def index(request):
    latest_question_list = Question.objects.order_by('-pub_date')[:5]
    context = {'latest_question_list': latest_question_list}
    return render(request, 'polls/index.html', context)

# Show specific question and choices

def detail(request, question_id):
    try:
        question = Question.objects.get(pk = question_id)
    except Question.DoesNotExist:
        raise Http404("Question does not exist")
    return render(request, 'polls/detail.html', {'question':
question})
```

```
# Get question and display results

def results(request, question_id):
    question = get_object_or_404(Question, pk = question_id)
    return render(request, 'polls/results.html', {'question':
question})

# Vote for a question choice

def vote(request, question_id):
    # print(request.POST['choice'])
    question = get_object_or_404(Question, pk = question_id)
    try:
        selected_choice = question.choice_set.get(pk =
request.POST['choice'])
    except (KeyError, Choice.DoesNotExist):
        # Redisplay the question voting form.
        return render(request, 'polls/detail.html', {
            'question': question,
            'error_message': "You didn't select a choice.",
        })
    else:
        selected_choice.votes += 1
        selected_choice.save()
        # Always return an HttpResponseRedirect after successfully
dealing
        # with POST data. This prevents data from being posted twice
if a
        # user hits the Back button.
        return HttpResponseRedirect(reverse('polls:results', args
=(question.id, )))
```

urls.py -

```
from django.contrib import admin
from django.urls import path,include

urlpatterns = [
    path('polls/', include('polls.urls')),
    path('admin/', admin.site.urls),
    ]
```

admin.py -

```
from django.contrib import admin
# Register your models here.
from .models import Question, Choice
```

```
# admin.site.register(Question)
# admin.site.register(Choice)

admin.site.site_header = "Pollster Admin"
admin.site.site_title = "Pollster Admin Area"
admin.site.index_title = "Welcome to the Pollster Admin Area"

class ChoiceInLine(admin.TabularInline):
    model = Choice
    extra = 3

class QuestionAdmin(admin.ModelAdmin):
    fieldsets = [(None, {'fields': ['question_text']}), ('Date
Information', {
        'fields': ['pub_date'], 'classes': ['collapse']}), ]
    inlines = [ChoiceInLine]

admin.site.register(Question, QuestionAdmin)
```

index.html -

```
{% block content %}
<h1 class ="text-center mb-3">Poll Questions</h1>
{% if latest_question_list %}
{% for question in latest_question_list %}
<div class ="card-mb-3">
     <div class ="card-body">
           <p class ="lead">{{ question.question_text }}</p>
           <a href ="{% url 'polls:detail' question.id %}" class ="btn
btn-primary btn-sm">Vote Now</a>
           </div>
</div>
{% endfor %}
{% else %}
<p>No polls available</p>
{% endif %}
{% endblock %}
```

Detail.html -

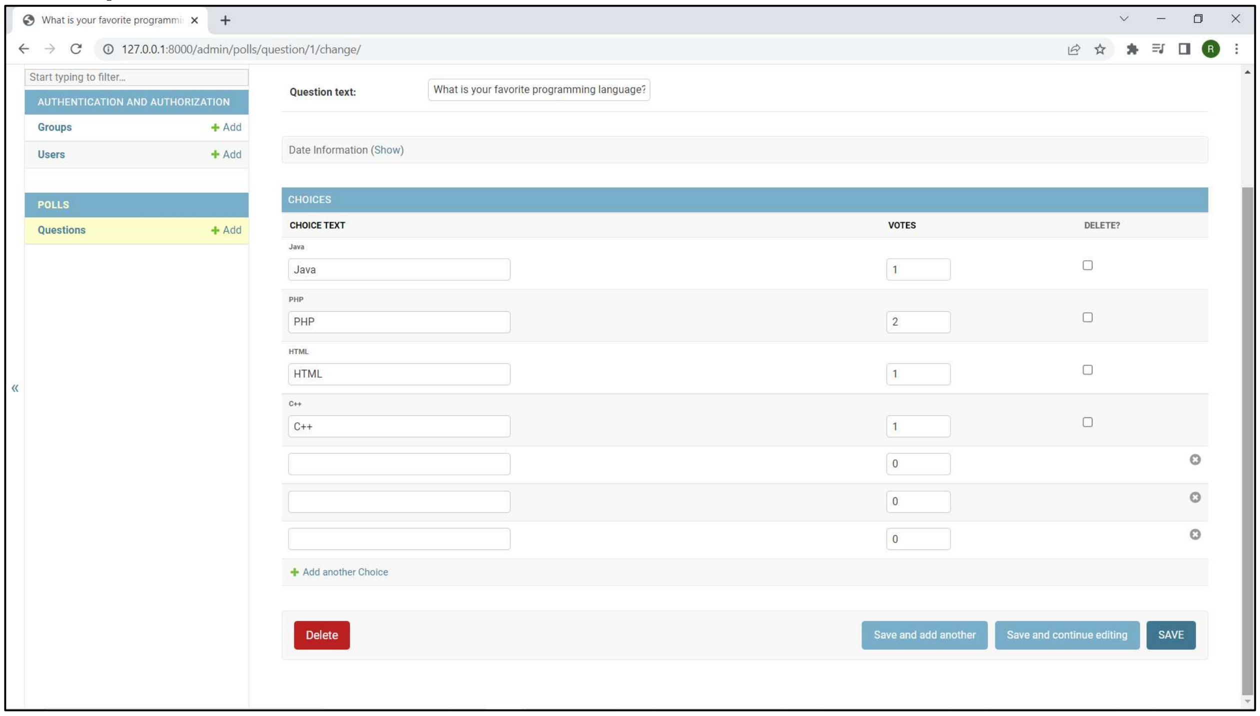
```
{% block content %}
<h1 class ="text-center mb-3">{{ question.question_text }}</h1>

{% if error_message %}
<p class ="alert alert-danger">
     <strong>{{ error_message }}</strong>
</p>
```

```
{% endif %}

<form action ="{% url 'polls:vote' question.id %}" method ="post">
      {% csrf_token %}
      {% for choice in question.choice_set.all %}
      <div class ="form-check">
            <input type ="radio" name ="choice" class ="form-check-
input" id ="choice{{ forloop.counter }}"
                  value ="{{ choice.id }}" />
            <label for ="choice{{ forloop.counter }}">{{
choice.choice_text }}</label>
      </div>
      {% endfor %}
      <input type ="submit" value ="Vote" class ="btn btn-success btn-
lg btn-block mt-4" />
</form>
{% endblock %}
```

Results.html -

```
{% block content %}
<h2> Vote Submitted Successfully</h2>
{% endblock %}
```

//Output-


What is your favorite programmi
127.0.0.1:8000/admin/polls/question/1/change/
Start typing to filter...
AUTHENTICATION AND AUTHORIZATION
Groups + Add
Users + Add
POLLS
Questions + Add
Delete
Save and add another
Save and continue editing
SAVE

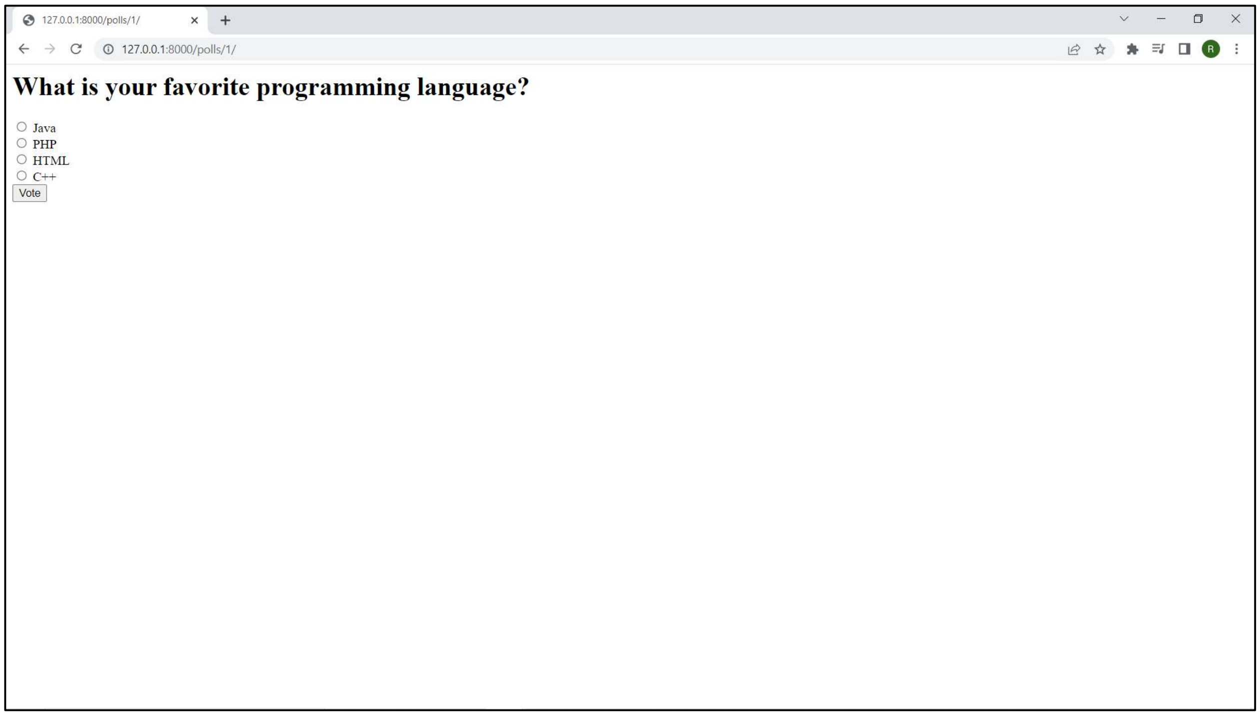
Question text: What is your favorite programming language?

Date Information (Show)

CHOICES

CHOICE TEXT	VOTES	DELETE?
Java	1	☐
PHP	2	☐
HTML	1	☐
C++	1	☐
	0	
	0	
	0	

+ Add another Choice

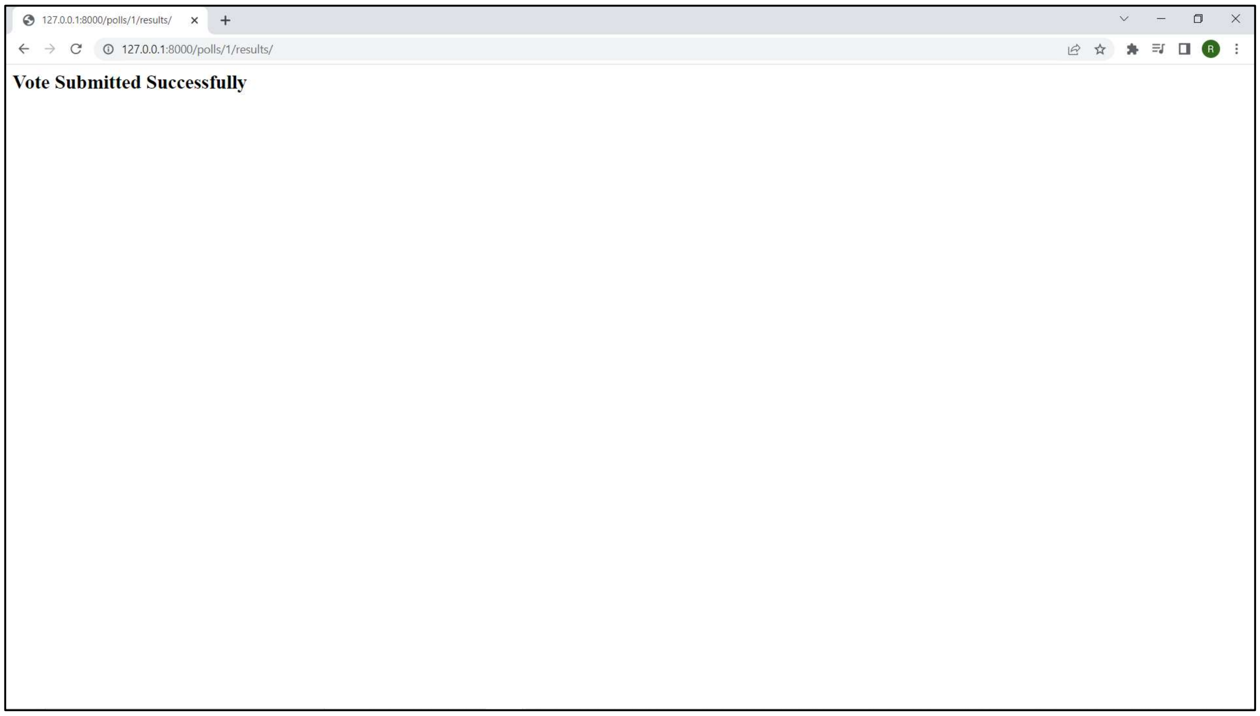


127.0.0.1:8000/polls/1/

What is your favorite programming language?

○ Java
○ PHP
○ HTML
○ C++

Vote



127.0.0.1:8000/polls/1/results/

Vote Submitted Successfully

23. A public site in which user can pick their favourite programming language and vote.

views.py -

```
from django.template import loader
from django.http import HttpResponse, HttpResponseRedirect
from django.shortcuts import get_object_or_404, render,Http404
from django.urls import reverse
from .models import Question, Choice

def index(request):
    latest_question_list = Question.objects.order_by('-pub_date')[:5]
    context = {'latest_question_list': latest_question_list}
    return render(request, 'polls/index.html', context)

# Show specific question and choices

def detail(request, question_id):
    try:
        question = Question.objects.get(pk = question_id)
    except Question.DoesNotExist:
        raise Http404("Question does not exist")
    return render(request, 'polls/detail.html', {'question':
question})

# Get question and display results

def results(request, question_id):
    question = get_object_or_404(Question, pk = question_id)
    return render(request, 'polls/results.html', {'question':
question})

# Vote for a question choice

def vote(request, question_id):
    # print(request.POST['choice'])
    question = get_object_or_404(Question, pk = question_id)
    try:
        selected_choice = question.choice_set.get(pk =
request.POST['choice'])
    except (KeyError, Choice.DoesNotExist):
        # Redisplay the question voting form.
        return render(request, 'polls/detail.html', {
            'question': question,
            'error_message': "You didn't select a choice.",
        })
    else:
        selected_choice.votes += 1
        selected_choice.save()
        # Always return an HttpResponseRedirect after successfully
dealing
        # with POST data. This prevents data from being posted twice
if a
        # user hits the Back button.
        return HttpResponseRedirect(reverse('polls:results', args
=(question.id, )))
```

urls.py -

```
from django.contrib import admin
from django.urls import path,include

urlpatterns = [
    path('polls/', include('polls.urls')),
    path('admin/', admin.site.urls),
    ]
```

index.html -

```
{% block content %}
<h1 class ="text-center mb-3">Poll Questions</h1>
{% if latest_question_list %}
{% for question in latest_question_list %}
<div class ="card-mb-3">
     <div class ="card-body">
          <p class ="lead">{{ question.question_text }}</p>
          <a href ="{% url 'polls:detail' question.id %}" class ="btn
btn-primary btn-sm">Vote Now</a>
          </div>
</div>
{% endfor %}
{% else %}
<p>No polls available</p>
{% endif %}
{% endblock %}
```

Detail.html -

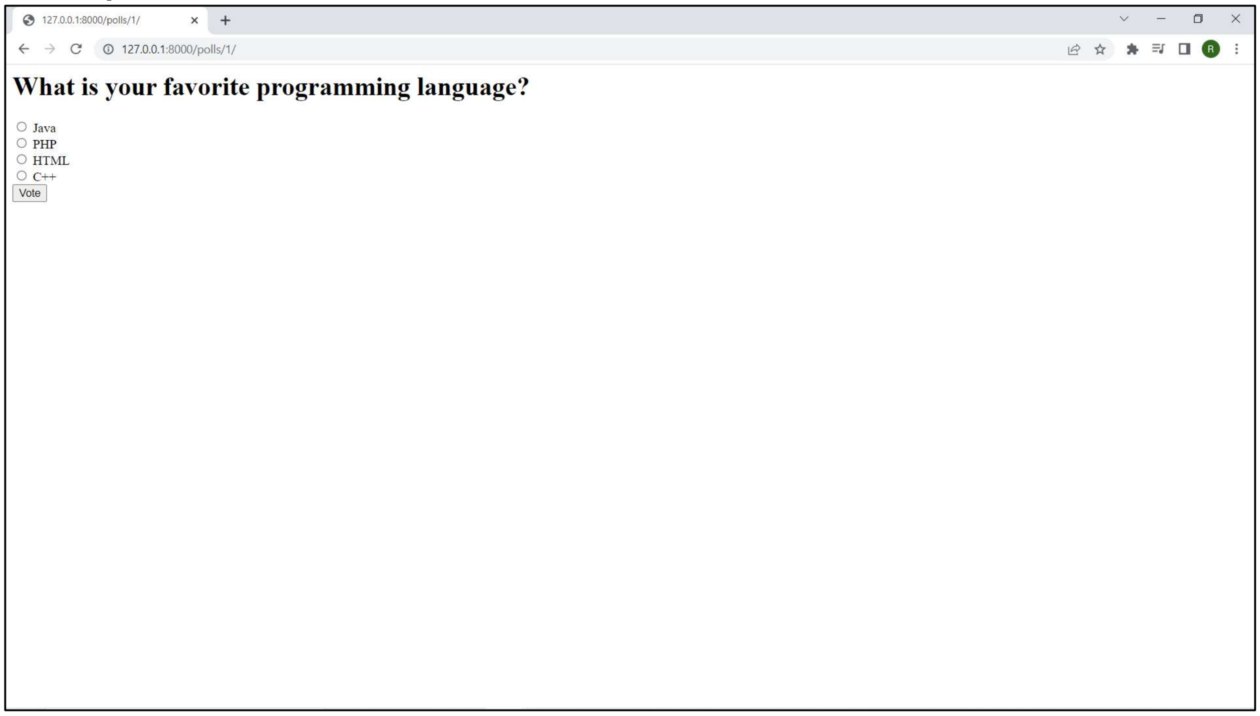
```
{% block content %}
<h1 class ="text-center mb-3">{{ question.question_text }}</h1>

{% if error_message %}
<p class ="alert alert-danger">
     <strong>{{ error_message }}</strong>
</p>
```

```
{% endif %}

<form action ="{% url 'polls:vote' question.id %}" method ="post">
     {% csrf_token %}
     {% for choice in question.choice_set.all %}
     <div class ="form-check">
          <input type ="radio" name ="choice" class ="form-check-
input" id ="choice{{ forloop.counter }}"
                value ="{{ choice.id }}" />
          <label for ="choice{{ forloop.counter }}">{{
choice.choice_text }}</label>
     </div>
     {% endfor %}
     <input type ="submit" value ="Vote" class ="btn btn-success btn-
lg btn-block mt-4" />
</form>
{% endblock %}
```

Results.html-

```
{% block content %}
<h2> Vote Submitted Successfully</h2>
{% endblock %}
```

//Output-

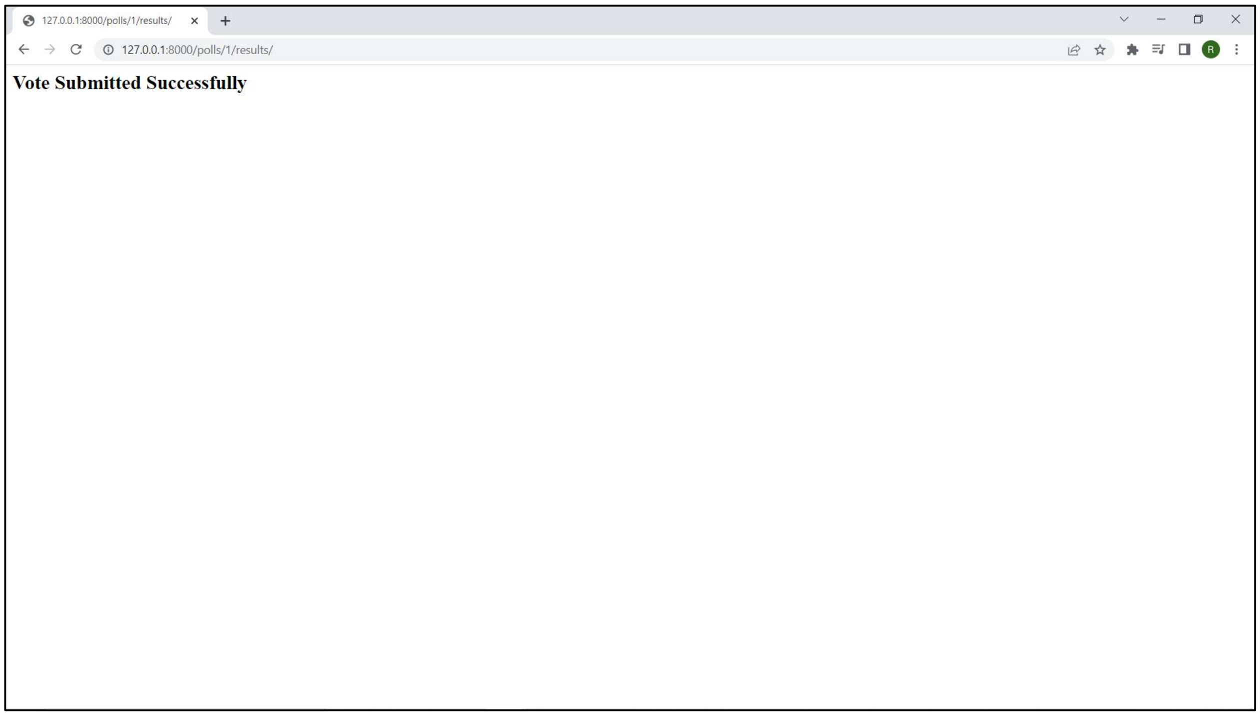


127.0.0.1:8000/polls/1/

What is your favorite programming language?

- ○ Java
- ○ PHP
- ○ HTML
- ○ C++

Vote



127.0.0.1:8000/polls/1/results/

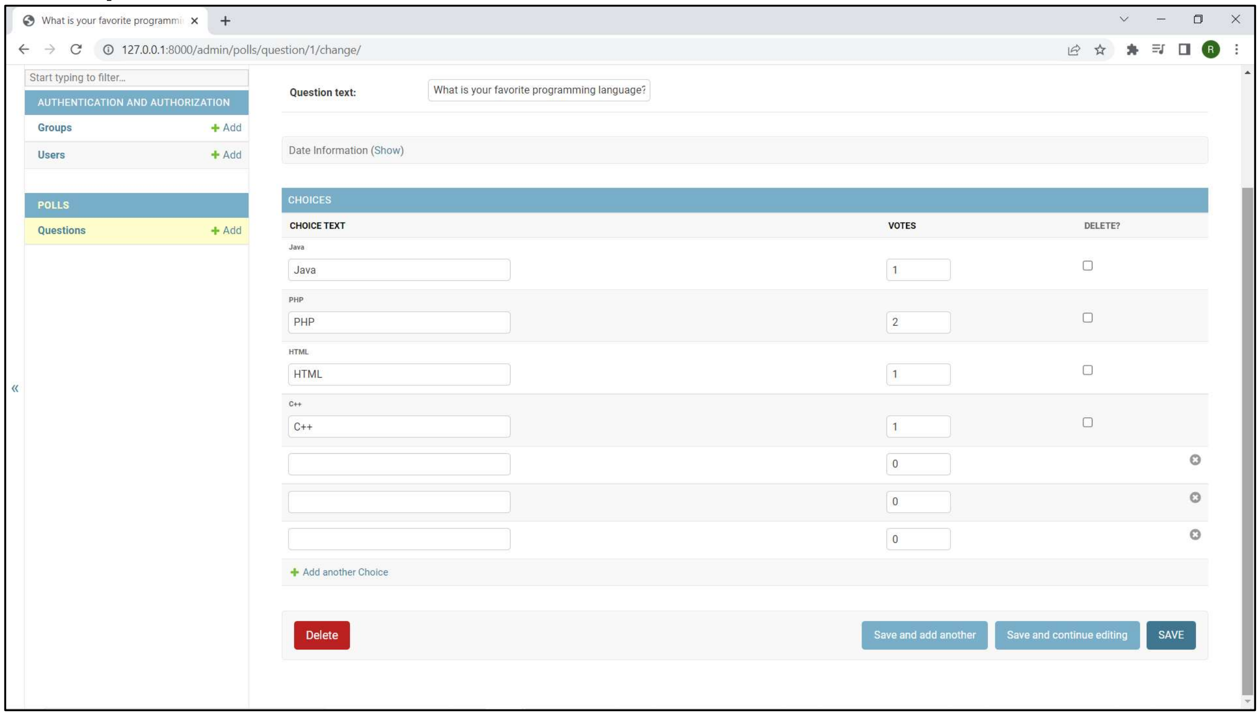
Vote Submitted Successfully

24.An admin site that lets you add, change and delete programming languages.

models.py -
```
from django.db import models

class Question(models.Model):
    question_text = models.CharField(max_length = 200)
    pub_date = models.DateTimeField('date published')

    def __str__(self):
        return self.question_text

  class Choice(models.Model):
    question = models.ForeignKey(Question, on_delete = models.CASCADE)
    choice_text = models.CharField(max_length = 200)
    votes = models.IntegerField(default = 0)

    def __str__(self):
        return self.choice_text
```

admin.py -
```
from django.contrib import admin
# Register your models here.
from .models import Question, Choice

# admin.site.register(Question)
# admin.site.register(Choice)

admin.site.site_header = "Pollster Admin"
admin.site.site_title = "Pollster Admin Area"
admin.site.index_title = "Welcome to the Pollster Admin Area"

class ChoiceInLine(admin.TabularInline):
    model = Choice
    extra = 3
class QuestionAdmin(admin.ModelAdmin):
    fieldsets = [(None, {'fields': ['question_text']}), ('Date
Information', {
        'fields': ['pub_date'], 'classes': ['collapse']}), ]
    inlines = [ChoiceInLine]

admin.site.register(Question, QuestionAdmin)
```

//Output-


What is your favorite programmi
127.0.0.1:8000/admin/polls/question/1/change/
Start typing to filter...
AUTHENTICATION AND AUTHORIZATION
Groups + Add
Users + Add
POLLS
Questions + Add
+ Add another Choice
Delete
Save and add another
Save and continue editing
SAVE

Question text: What is your favorite programming language?

Date Information (Show)

CHOICES

CHOICE TEXT	VOTES	DELETE?
Java	1	☐
PHP	2	☐
HTML	1	☐
C++	1	☐
	0	
	0	
	0	

25.Create your own blog using Django.

models.py -
```
from django.db import models
from django.contrib.auth.models import User
class myblog(models.Model):
    title = models.CharField(max_length=200, unique=True)
    slug = models.CharField(max_length=200, unique=True)
```

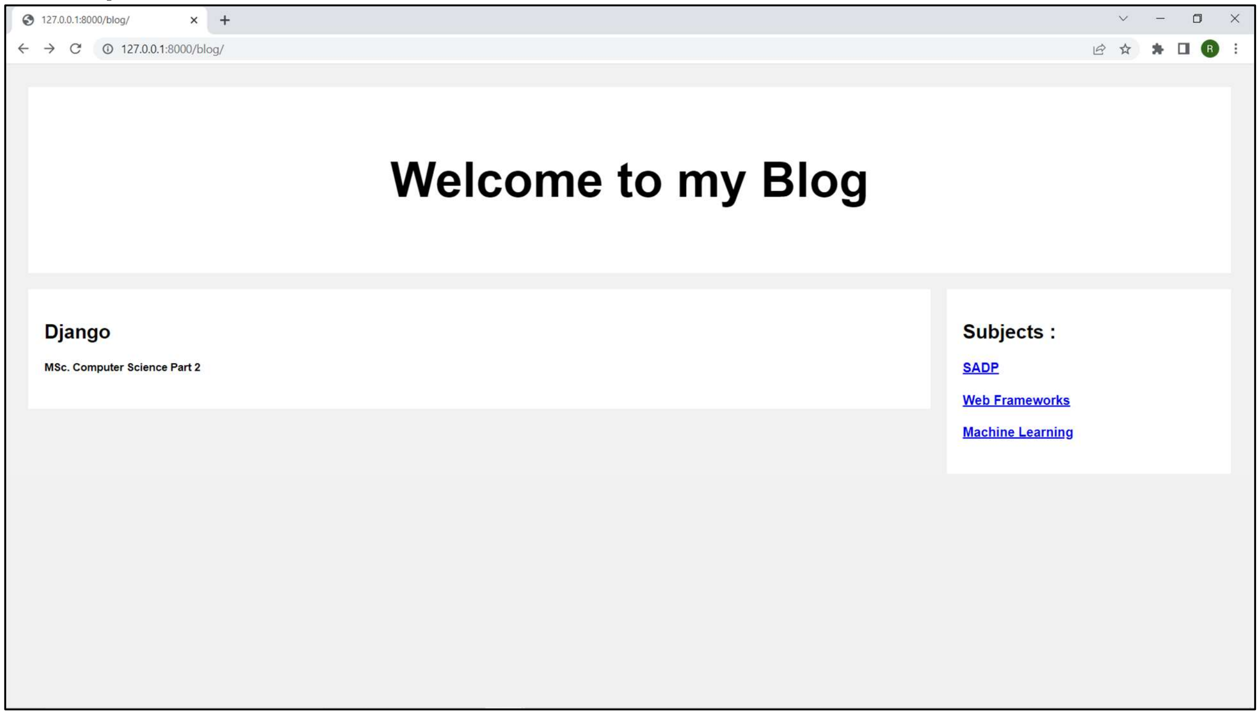
views.py -
```
from django.shortcuts import render
from blog.models import myblog
def myf(req):
      model = myblog
      context = {"reg":myblog.objects.all()}
      return render(req,'blog.html',context)
```

urls.py -
```
from django.contrib import admin
from django.urls import path
from blog.views import myf
urlpatterns = [
    path('admin/', admin.site.urls),
    path('blog/',myf)
]
```

blog.html -
```
<!DOCTYPE html>
<html>
<head>
</head>
<body>

<div class="header">
  <h2>Welcome to my Blog</h2>
</div>

<div class="row">
  <div class="leftcolumn">
    <div class="card">
      <h2>Django</h2>
      <h5>MSc. Computer Science Part 2</h5>
    </div>
  </div>
  <div class="rightcolumn">
```

```
    <div class="card">
      <h2>Subjects :</h3>
      <h4>SADP</h6>
      <h4>Web Frameworks</h6>
      <h4>Machine Learning</h6>
      </div>
  </div>
</div>
</body>
</html>
```

//Output-



127.0.0.1:8000/blog/

Welcome to my Blog

Django

MSc. Computer Science Part 2

Subjects :

SADP

Web Frameworks

Machine Learning

26. Create a clone of the "Hacker News" website.

urls.py –

```
from django.contrib import admin
from django.urls import path
from newclone.views import newclone
urlpatterns = [
    path('admin/', admin.site.urls),
    path('home/', newclone),
]
```

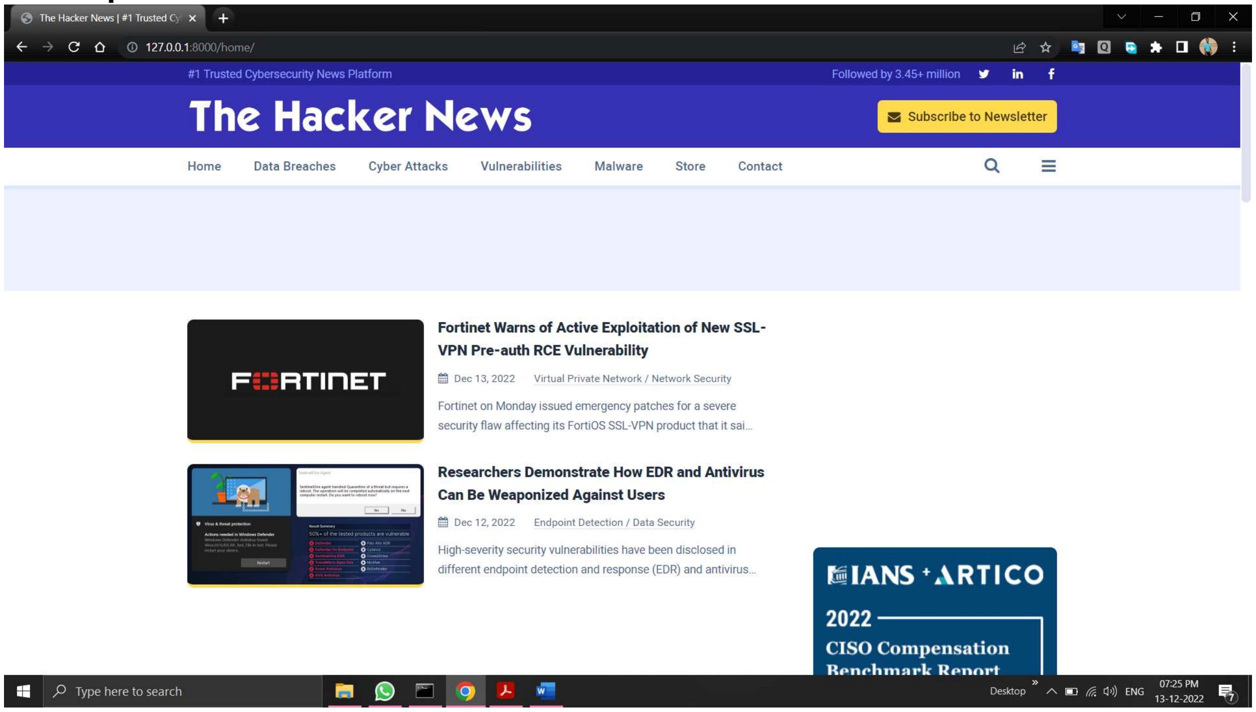
views.py –

```
from django.shortcuts import render

def newclone(req):
    return render(req,'index.html')
```

index.html –

as per design.

//Output –



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