NEPAL COLLEGE OF INFORMATION TECHNOLOGY

Balkumari, Lalitpur
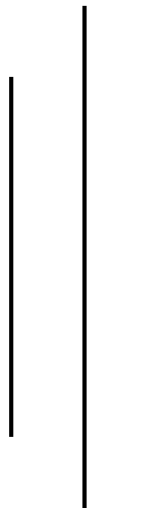

(Affiliated to Pokhara University)

A Lab Report

On

Subject:- Web Technology .

Lab Report # 1 .

Title: - Introduction to HTML .

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Semester: - 3rd

Submitted to:

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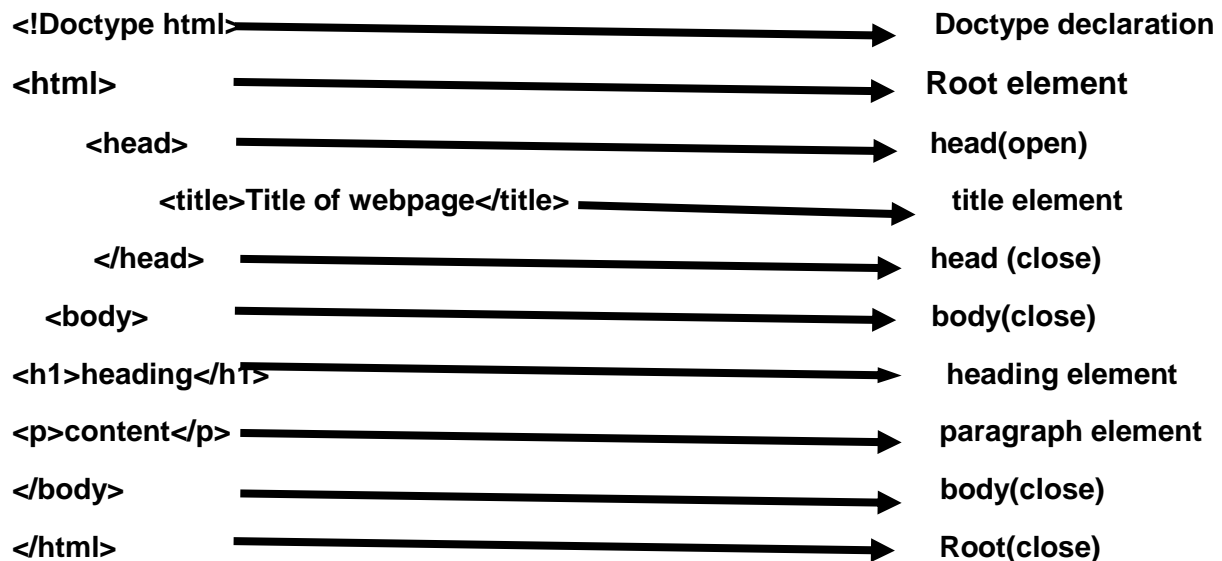
Submission Date: - 2023/05/09

VS Code

Visual Studio Code, commonly known as VSCode, is a free and open-source code editor developed by Microsoft. It supports a wide range of programming languages, and features include debugging, syntax highlighting, and Git integration. Its popularity has made it one of the most widely used code editors among developers.

Theory: -

●HTML was developed by Tim Berners-Lee in late 1991s.

● HTML stands for Hypertext Markup Language. It is a formatting language which uses tags for preparing documents.

● The structure of HTML id based on a system of tags and attributes that define the elements of a web page.

● It is used to design the structure of the webpage using tags and elements , it provides basic frame to the webpage.

● There are many text editors can be used to create HTML files and must be saved with extension .htm or .html but html is more preferred.

● The proper use of tags and attributes is essential for creating well-structured and accessible HTML documents

Strucutre Of HTML:

<!Doctype html> ⟶	**Doctype declaration**
<html> ⟶	**Root element**
<head> ⟶	**head(open)**
<title>Title of webpage</title> ⟶	**title element**
</head> ⟶	**head (close)**
<body> ⟶	**body(close)**
** heading ** ⟶	**heading element**
** content ** ⟶	**paragraph element**
</body> ⟶	**body(close)**
</html> ⟶	**Root(close)**

HTML Editors:-

VS Code,Sublime text,Notepad,Notepad++,etc are some HTML editors.

HTML Tags: - HTML tags are like a set of keywords that defines how the page will be formatted ad displayed in webpage. There are two types of tags they are

1. Paired tags: Tags that have both opening and closing tags .

Eg:<p>content<p>
2. Unpaired tags: Tags that have only single tags

Element Name	Description
<b>	Used to bold text
<strong>	This is a logical tag, which tells the browser that the text is important.
<i>	This is a physical tag which is used to make text italic
<mark>	This tag is used to highlight text.
<u>.	This tag is used to underline text written between it
<tt>	This tag is used to appear a text in teletype. (not supported in HTML5)
<strike>	This tag is used to draw a strikethrough on a section of text. (Not supported in HTML5)
<sup>	It displays the content slightly above the normal line.
<sub>	It displays the content slightly below the normal line.
<del>	This tag is used to display the deleted content.
<ins>	This tag displays the content which is added
<big>	This tag is used to increase the font size by one conventional unit.
<small>	This tag is used to decrease the font size by one unit from base font size.
 	This tag is used to add a line break.
<hr>	This tag is used to insert horizontal line.
<h1>	It is used to specify the heading.

<dfn>	It specifies the topic going to be defined.
<blockquote>	Used to specify if copied from other source.
<q>	This tag is used for short quotation.
<code>	This tag is used to define piece of computer code.
<kbd>	This tag is used to define keyboard input
<address>	Used to provide address of author/owner
<!—comment--	>> Used to write comment in HTML
<em>	This is a logical tag which is used to display content in italic.

HTML Elements:

1. <abbr> tag :

 It defines abbreviation

2. <q>tag : Short quotation

3. <code>tag : Specify piece of code

```
<> lab.html > ⊘ html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <meta name="viewport" content="width=device-width,
       initial-scale=1.0">
7      <title>lab1</title>
8  </head>
9  <body>
10     <h1>The code tag</h1>
11     <p>this is a code <code>printf("hello world);</code></p>
12 </html>
```

http://127.0.0.1:3000/lab.html

The code tag

this is a code `printf("hello world);`

4. <kbd>tag : Defines keyboard input

```
<> lab.html > ⊘ html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <meta name="viewport" content="width=device-width,
       initial-scale=1.0">
7      <title>lab1</title>
8  </head>
9  <body>
10     <h1>The kbd tag</h1>
11     <p> to copy press <kbd>ctrl</kbd>+<kbd>c</kbd></p>
12     <p>to paste press <kbd>ctrl</kbd>+<kbd>v</kbd></p>
13 </html>
```

http://127.0.0.1:3000/lab.html

The kbd tag

to copy press `ctrl`+`c`

to paste press `ctrl`+`v`

5. <address>tag :

```
<> lab.html > ⊘ html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <meta name="viewport" content="width=device-width,
       initial-scale=1.0">
7      <title>lab1</title>
8  </head>
9  <body>
10     <h1>The address element</h1>
11 <address>created by:<a href="mailto:pratik.211529@ncit.edu.
   np">Pratik</a><br>
12 visit me at: room 404,NCIT</address>
13
14 </html>
```

http://127.0.0.1:3000/lab.html

The address element

created by:_Pratik_
visit me at: room 404,NCIT

6. <aside>tag:

```
<> lab.html > ⊘ html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <meta name="viewport" content="width=device-width,
       initial-scale=1.0">
7      <title>lab1</title>
8  </head>
9  <body>
10     <h1>The asside tag</h1>
11     <aside>
12         <h3>I am aside</h3>
13 <p>It helps us to display the content that is not related to main
   content directly but related indirectly.</p>
14 </aside>
15 </html>
```
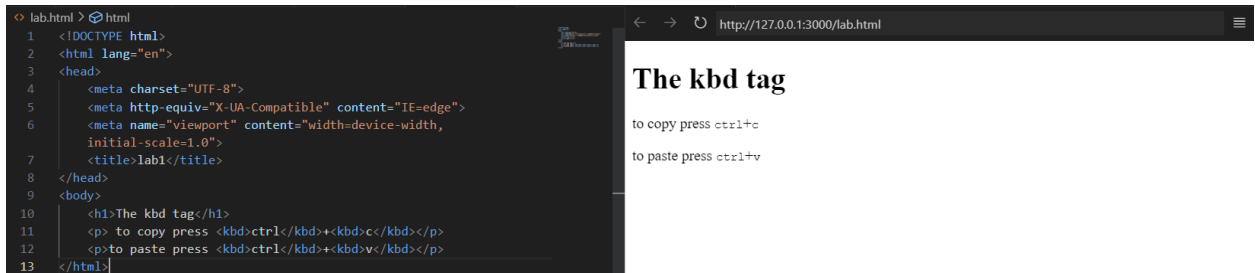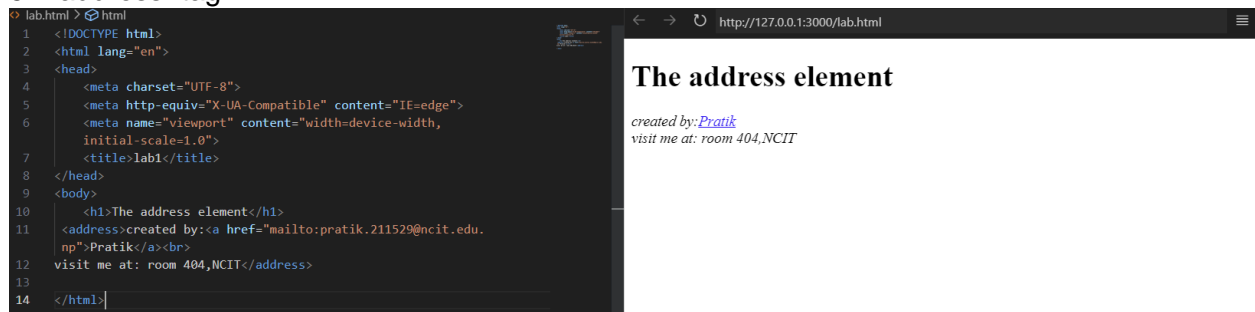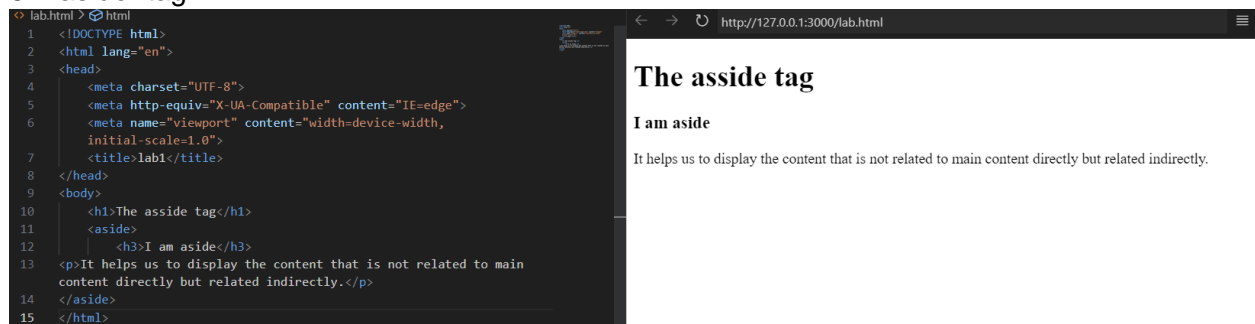
http://127.0.0.1:3000/lab.html

The asside tag

I am aside

It helps us to display the content that is not related to main content directly but related indirectly.

7. <article>tag: tag specifies independent, self-contained content.

```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>lab1</title>
</head>
<body>
    <h1>The article tag</h1>
    <article>
    <h3>chatGPT</h3>
    <p>  ChatGPT is a large language model designed to understand
    and respond to natural language input</p>
</article>
</html>
```

http://127.0.0.1:3000/lab.html

The article tag

chatGPT

ChatGPT is a large language model designed to understand and respond to natural language input

8. <cite>tag: Specifies the title of creative content.

```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>lab1</title>
</head>
<body>
    <h1>The cite tag</h1>
    <img src="https://media.npr.org/assets/img/2012/02/02/
    mona-lisa_custom-31a0453b88a2ebcb12c652bce5a1e9c35730a132-s1100-
    c50.jpg"width="120" alt="">
    <p><cite>Monalisa</cite> by leonardo da Vinci</p>

</html>
```

http://127.0.0.1:3000/lab.html

The cite tag

Monalisa by leonardo da Vinci

9.<meter>tag: used to represent the measurement of usage

```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>lab1</title>
</head>
<body>
    <h1>The meter element</h1>
    <P>it displays the storage in disc</P>
    <label for="storage">storage</label>
    <meter id="storage" value="69" min="0" max="100"></meter>
</html>
```

http://127.0.0.1:3000/lab.html

The meter element

it displays the storage in disc

storage

11.<pre>tag: This tag is used to display content as we type in editor

```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>lab1</title>
</head>
<body>
    <h1>The pre element</h1>
    <pre>by using this tag
    we can get the output
    as we type in
    code
    </pre>

</html>
```

http://127.0.0.1:3000/lab.html

The pre element

```
by using this tag
    we can get the output
    as we type in
    code
```

12.<progress>tag: It is used to specify the progress of a task

```
<> lab.html > ⊘ html
1    <!DOCTYPE html>
2    <html lang="en">
3    <head>
4        <meta charset="UTF-8">
5        <meta http-equiv="X-UA-Compatible" content="IE=edge">
6        <meta name="viewport" content="width=device-width,
         initial-scale=1.0">
7        <title>lab1</title>
8    </head>
9    <body>
10       <h1>The progress element</h1>
11       <label for="file">Downloading progress</label>
12       <progress id="file" value="36" max="100"> </progress>
13
14   </html>
```

http://127.0.0.1:3000/lab.html

The progress element

Downloading progress ▬▬▬▬▬

13.<time>tag: Used to specify time or date

```
lab.html > ⊘ html
1    <!DOCTYPE html>
2  ∨ <html lang="en">
3  ∨ <head>
4        <meta charset="UTF-8">
5        <meta http-equiv="X-UA-Compatible" content="IE=edge">
6        <meta name="viewport" content="width=device-width,
         initial-scale=1.0">
7        <title>lab1</title>
8    </head>
9    <body>
10       <h1>The time element</h1>
11       <p>This resturant is oprn from <time>11:00</time> to <time>6:00</
         time></p>
12       <p>Note: Nothing special is renderd by the time element</p>
13   </html>
```
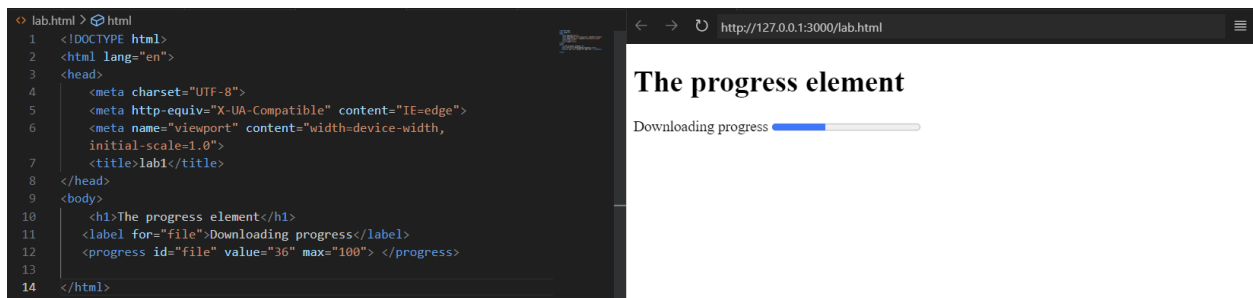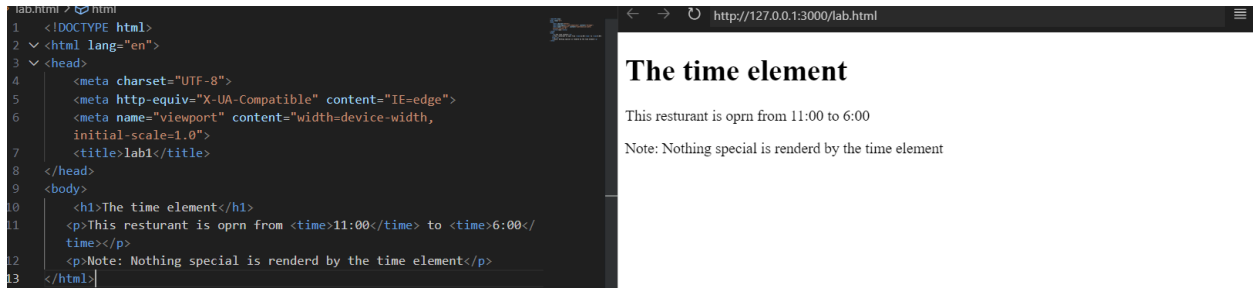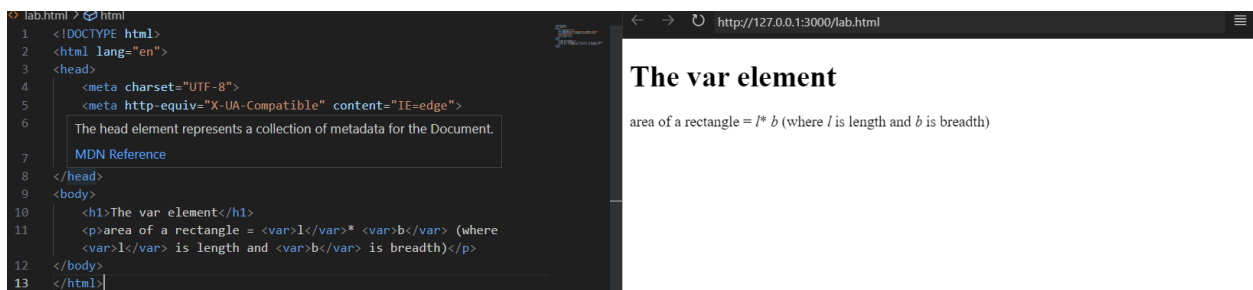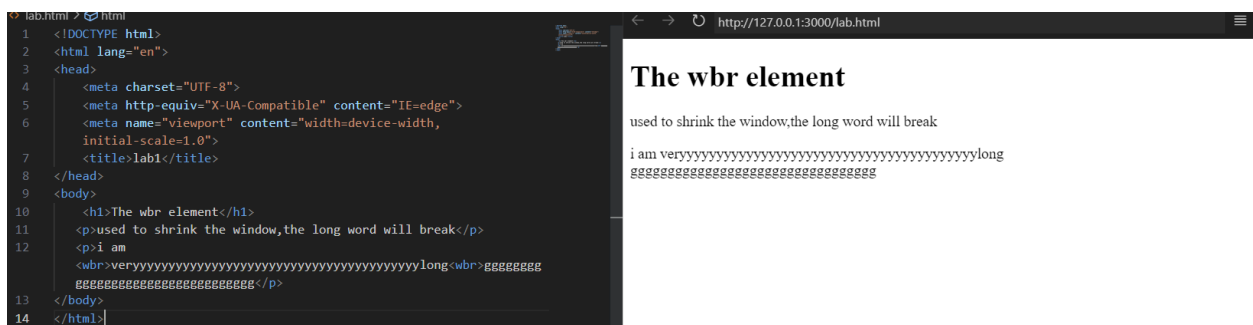
http://127.0.0.1:3000/lab.html

The time element

This resturant is oprn from 11:00 to 6:00

Note: Nothing special is renderd by the time element

14.<var>tag: used to define variables used

```
<> lab.html > ⊘ html
1    <!DOCTYPE html>
2    <html lang="en">
3    <head>
4        <meta charset="UTF-8">
5        <meta http-equiv="X-UA-Compatible" content="IE=edge">
6        ┌─────────────────────────────────────────────────────────┐
         │ The head element represents a collection of metadata for the Document. │
         │                                                         │
         │ MDN Reference                                           │
         └─────────────────────────────────────────────────────────┘
7    </head>
8    </head>
9    <body>
10       <h1>The var element</h1>
11       <p>area of a rectangle = <var>l</var>* <var>b</var> (where
         <var>l</var> is length and <var>b</var> is breadth)</p>
12   </body>
13   </html>
```

http://127.0.0.1:3000/lab.html

The var element

area of a rectangle = $l * b$ (where l is length and b is breadth)

15.<wbr>tags : Used to specify where a word break is suitable in a dynamic page.

```
<> lab.html > ⊘ html
1    <!DOCTYPE html>
2    <html lang="en">
3    <head>
4        <meta charset="UTF-8">
5        <meta http-equiv="X-UA-Compatible" content="IE=edge">
6        <meta name="viewport" content="width=device-width,
         initial-scale=1.0">
7        <title>lab1</title>
8    </head>
9    <body>
10       <h1>The wbr element</h1>
11       <p>used to shrink the window,the long word will break</p>
12       <p>i am
         <wbr>veryyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyylong<wbr>ggggggg
         ggggggggggggggggggggggggg</p>
13   </body>
14   </html>
```

http://127.0.0.1:3000/lab.html

The wbr element

used to shrink the window,the long word will break

i am veryyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyylong
gggggggggggggggggggggggggggggggggggg

Question-1

```html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <meta name="viewport" content="width=device-width,
       initial-scale=1.0">
7      <title>lab1</title>
8  </head>
9  <body>
10     <h1>This is my 1<sup>st</sup> lab</h1><hr><hr>
11     <p>hello my name is <b>Pratik</b> <u>Chapagain</u>.</p>
12     <p>I live in <strong>Kathmandu</strong></p>
13     <p>I graduated from <mark>Nepal College of Information
       Technology</mark></p>
14 <p>I <small>am</small> 20 years old.</p>
15 <p>I love <del>red</del> black colour.</p>
16 <p>(a+b)<sup>2</sup>=a<sup>2</sup>+2ab+b<sup>2</sup></p>
17 <p>I went to drink H<sub>2</sub>0.</p>
18 <p>I am very <big>happy</big></p>
19 <p>I am very <small>sad</small></p>
20 <p>BIG dhamaka at NCIT get coupon just at <del>1000</del>400</
   p>
21 <p>I <br>am <br> the <br>professor <br> of <br>NCIT
   <br>College.</p>
22
23 </body>
24 </html>
```

http://127.0.0.1:3000/Pratik.html

This is my 1stlab

***

i am writing HTML code

Name:Pratik Chapagain
faculty:Science and Technology
Roll number:211529

My name is Pratik Chapagain and I am originally from syangja and currently living in kathmandu for study purpose.Currently I am reading Bachelors of IT enginnering in NCIT college.Currently I am in 3rdsemester.I am a beginer in HTML and learning it. I want to learn to design a website may be personal or commercial.

Question 2

```html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <meta name="viewport" content="width=device-width,
       initial-scale=1.0">
7      <title>lab1</title>
8  </head>
9  <body>
10     <h1>This is my 1<sup>st</sup> lab</h1><hr><hr>
11     <p>hello my name is <b>Pratik</b> <u>Chapagain</u>.</p>
12     <p>I live in <strong>Kathmandu</strong></p>
13     <p>I graduated from <mark>Nepal College of Information
       Technology</mark></p>
14 <p>I <small>am</small> 20 years old.</p>
15 <p>I love <del>red</del> black colour.</p>
16 <p>(a+b)<sup>2</sup>=a<sup>2</sup>+2ab+b<sup>2</sup></p>
17 <p>I went to drink H<sub>2</sub>0.</p>
18 <p>I am very <big>happy</big></p>
19 <p>I am very <small>sad</small></p>
20 <p>BIG dhamaka at NCIT get coupon just at <del>1000</del>400</
   p>
21 <p>I <br>am <br> the <br>professor <br> of <br>NCIT
   <br>College.</p>
22
23 </body>
24 </html>
```

http://127.0.0.1:3000/sample.html

This is my 1st lab

***

hello my name is **Pratik** Chapagain.

I live in **Kathmandu**

I graduated from Nepal College of Information Technology

I am 20 years old.

I love red black colour.

(a+b)^2=a^2+2ab+b^2

I went to drink H$_2$O.

I am very happy

I am very sad

BIG dhamaka at NCIT get coupon just at 1000400

I
am
the
professor
of
NCIT
College.