Q.1   <!DOCTYPE html> is it a tag of html? If not, what is it and why do we useit?

Ans:- <!DOCTYPE html>: This is the doctype declaration, which specifies the version of HTML being used in the
document. In this case, it's HTML5.

Q.2   Explain Semantic tags in html? And why do we need it?

Semantic tags:- The core characteristic of a semantic element is that it clearly communicates its meaning to both the developer and the browser. These elementsclearly define its content.[1]

Why Do We Need to Use Semantic Tags in HTML?

- The semantic HTML tags help the search engines and other userdevices to determine the importance and context of web pages.
- The pages made with semantic elements are much easier to read.
- It has greater accessibility. It offers a better user experience.

Q.3   Differentiate between HTML Tags and Elements?

HTML Tags	HTML Elements
It consists of an opening bracket and a closing bracket.	It consists of a starting tag, content, and an end tag.
Usually consist of reserved keywords that have a unique meaning.	It consists of a generalised component thatthe user wants to display on their HTML page.

They cannot be nested.   They can be nested.

Q.4 Build Your Resume using HTML only

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Rakesh resume</title>
</head>
```

```
<body>
    <table>
        <tr>
            <th> <img src="IMG-20220301-WA0002.jpg" height="150px width150px" alt="">
            </th>
            <th>
                <h1>Rakesh Kumar Yadav</h1>
                <p1>I would like to be a part company were i can give my hundred percent</p1>
            </th>
        </tr>
    </table>
    <hr>
```

```
    <h2>Education</h2>
    <table border="1">
        <tr>
            <th>course</th>
            <th>Institution</th>
            <th>Year</th>
            <th>Result</th>
        </tr>
        <tr>
            <td>BE in Mechanichal</td>
            <td>Sistec-R Bhopal</td>
            <td>2017-2021</td>
            <td>68%</td>
        </tr>
        <tr>
            <td>12 <sup>th</sup>Grade</td>
            <td>Y.M.Inter College</td>
            <td>2015-2017</td>
            <td>51%</td>
        </tr>
```

```
    </table>
    <h2>Internship</h2>
    <p><strong>crisp bhopal</strong></p>
    <p><strong>Trainee</strong></p>
    <ul>
        <li>I in crisp i have learn how to figure out problem of new generation vehical through car
mecatronics</li>
    </ul>
    <tr>
```

```html
        <h1>Project</h1>
        <p><strong>Engine by Hydrogen<strong></p>
        <ul>
            <li>In this project we are making engine to run through hydrogen gas</li>
        </ul>
    </tr>
    <tr>
        <h1>Experience</h1>
        <p>Byjus</p>
        <ul>
            <li>BDA</li>
        </ul>
    </tr>
    <hr>
    <tr>
        <h1>contact details</h1>
        <ul>
            <li>phone-6201212396</li>
            <li> email-rakuyadav1411@gmail.com</li>
        </ul>
    </tr>

</body>

</html>
```

Q.5   Write HTML code so that it looks like the below image

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <link rel="stylesheet" href="Resume.css">
    <title>Resume</title>
</head>
<body>
<div class="image">
    <img
src="https://cdn.dubootcamp.com/wp-content/uploads/sites/66/2020/05/shu
tterstock_753780223-1024x683.jpg" alt="" width="200px", height="200px">
    <p>we will be learning the following thing this week</p>
    <p>Day1   Day2   Day3  Day4</p>
    <p>Linu1    HTML    Linux2    Linux3</p>
    <p>Git 1    CSS    Git2    Bootstrap</p>
</div>
<form>
    <label for="name">Name:</label>      
    <input type="text"><br>
    <label for="name">Phone mo:</label>  
```

```html
        <input type="text"><br>
        <label for="name">email id:</label>     
        <input type="text">
</form>
<h1>The folling thing are important to be a programmer</h1>
<ul>
        <li>A problem solving mindset</li>
        <li>Consistency</li>
<li>clean code</li>
<li>Thorough knowledge of core concepts</li>
<li>Relable code</li>
<li>Speed</li>
</ul>
</body>
</html>
```

Q.6   What are some of the advantages of HTML5 over its previous versions?

Ans:-1. Cleaner markup/ Improved code:HTML5 will enable web designers to use cleaner, neater code. We can remove div tags and replace them with semantic HTML5 elements.

2. Elegant forms:HTML5 enables designers to use fancier forms. There will be different types of inputs, search and different fields for different purposes.

3. Consistency:As websites will adopt the new HTML5 elements we will see more consistency in terms of HTML used to code a web page on one site compared to another. This will make it much easier for designers and developers to immediately understand how aweb page is created.

4. Supports rich media elements:HTML5 has an inbuilt capability to play audio and video andso we can bid goodbye to those plugin tags.

5. Offline Application Cache:
HTML5 offers an offline application cache facility which will load the page the user has visited even if the user is temporarily offline. This feature will help the files to load muchfaster and reduce load on the server.

Q.7   Create a simple Music player using html only

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <audio src="https://www.pagalworld.com.se/files/download/id/3521" controls ></audio>
</body>
</html>
```

Q.8 What is the difference between <figure> tag and <img> tag?

S.No.	<figure> Tag	<img> Tag
1.	The figure tag is used to semantically organise the content ofimages, videos, audios or even charts or tables, block of codes in the HTML document.	The image tag is used to addan image to an HTML page. <img> tag can only insert animage.
2.	<figure> tag is a container tag.	<img> tag is a void tag.

between <figure> & <img> tag

3.	This tag provides a container for content that is equivalent to a figureor diagram in a book.	The HTML <img> tag is used for embedding images into anHTML document.
4.	This tag is an inline element.	It is an inline element but when we specify width and height it becomes a block element.
5.	You can use the figure element in conjunction with the figcaption element to provide a caption for thecontents of your figure element.	In image tag there's no special tag for captions, rather we can use <p> tag or <span> tag to add pseudocaptions.
6.	It makes it easy for the machine to understand the code. Easy to get onsearch engines.	It is difficult for machines to understand.
7.	The <figure> element itself maycontain multiple other child elements be it a block of code, images, audios, video etc.	The <img> tag can not have multiple elements inside it only images can be added in <img> tag.

8.	The figure tag contains defaultalignment and styling.	The image tag does not contain any default alignmentand styling.

Answer:
The difference between html tag and attribute

HTML attributes are found only in the starting tag. HTML tags are almost like keywordswhere every single tag has unique meaning. HTML elements specify the general content.HTML attributes specify various additional properties to the existing HTML element.

Some global example of attributes
Accesskey, autocapitalize,autofocus,class,contenteditable,etcetera

Q. 10 Write Html code so that it looks like the below image

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <link rel="stylesheet" href="style.css">
</head>
<body>
    <table border="1" width="400">
        <tr>
            <th rowspan="3">Day</th>
            <th colspan="3">Seminar</th>
        </tr>
        <tr>
            <th colspan="2">schedule</th>
            <th rowspan="2">Topic</th>
        </tr>
        <tr>
            <th>Begin</th>
            <th>End</th>
        </tr>
        <tr>
            <td rowspan="2">Monday</td>
            <td rowspan="2">8:00am</td>
            <td rowspan="2">5:00pm</td>
            <td>Introduction of Xml</td>
        </tr>
        <tr>
            <td>Validity:DTD and Relaxing</td>
        </tr>
        <tr>
            <td rowspan="3">Tuesday</td>
            <td>8:00am</td>
            <td>11:00am</td>
            <td rowspan="2">XPATH</td>
        </tr>
        <tr>
            <td>11:00am</td>
            <td>2:00pm</td>
        </tr>
        <tr>
            <td>2:00am</td>
            <td>5:00pm</td>
            <td>XSL Transformation</td>
        </tr>
        <tr>
            <td>Wednesday</td>
            <td>8:00am</td>
            <td>12:00pm</td>
            <td>XLS Formation</td>
        </tr>


    </table>



</body>
</html>
```