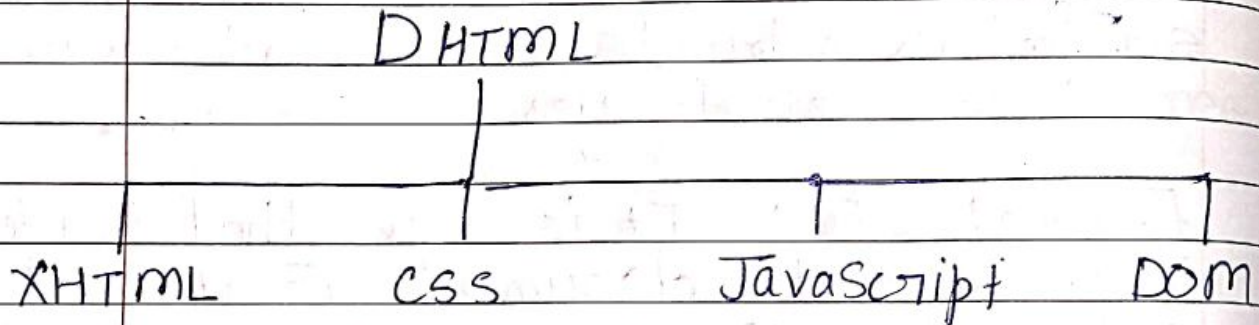Q What is DHTML?

Ans DHTML stands for dynamic HTML that makes possible a web page to react and change in response to the user's actions.

DHTML = HTML + CSS + JavaScript

DHTML

XHTML   CSS   JavaScript   DOM

Q Define HTML DOM?

The HTML DOM is an object Model for HTML. It defines:

- HTML elements as objects
- Properties for all HTML elements
- methods for all HTML elements
- Events for all HTML elements

The HTML DOM is an API (Programming interface) for JavaScript

- JavaScript can add/change/remove
    - HTML elements
    - HTML attributes
    - CSS styles
    -

Q What are xml Syntax rules

Ans: 1) All xml elements must have a closing tag

Incorrect:
<body> This is my document

Correct
<body> This is my document </body>

2) XML tags are case sensitive

Incorrect:
<Body> xyz </body>

Correct

<body> xyz </body>

3) All xml elements must be properly nested

Incorrect <i> xyz </i>
correct <i> xyz </i>

4) All xml documents must have a root element

```
<root>
   <child>
      <subchild> ..... </subchild>
   </child>
</root>
```
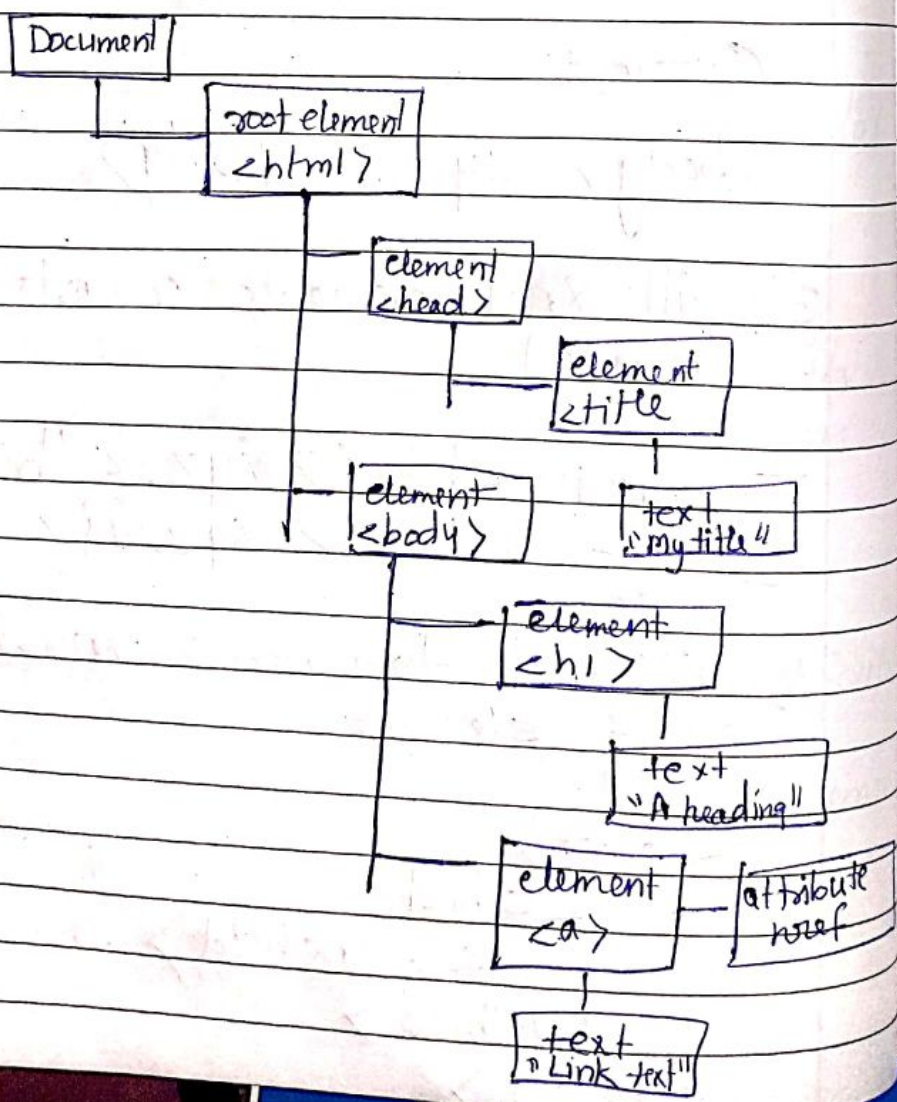
5. Attributes values must always be quoted.

Q. Write short notes on the following

(i.) DOM: The Document Object Model (DOM) is a cross-platform and language-independent interface that treats an XML or HTML document as a tree wherein each node is an object representing a part of the document. The DOM represents a document with a logical tree

eg.

```
Document
   |
   └── root element
       <html>
           |
           ├── element
           |   <head>
           |       |
           |       └── element
           |           <title
           |               |
           |               └── text
           |                   "my title"
           |
           └── element
               <body>
                   |
                   ├── element
                   |   <h1>
                   |       |
                   |       └── text
                   |           "A heading"
                   |
                   └── element ──── attribute
                       <a>          href
                           |
                           └── text
                               "Link text"
```

2. **DTD** : A document type definition (DTD) is a set of markup declarations that define a document type for a markup language

A DTD defines the structure and the legal elements and attributes of an XML document

An application can use a DTD to verify that XML data is valid.

DTD is of two types :

Internal DTD : If the DTD is declared inside the XML file, it must be wrapped inside the <! DOCTYPE > definition.

External DTD : If the DTD is declared in an external file, the <! DOCTYPE> definition must contain a reference to the DTD file.

3. **XML Schema** : It is also called as XSD (Xml Schema Definition) It is used to describe and validate the structure and content of xml data. Xml schema defines the elements, attributes, and data types.

< xs : schema xmlns : xs = "https://www. XMLSchema"

Elements of XML Schema

Simple type element: It is used only in the context of the text.

eg: xs: integer
    xs: boolean
    xs: string
    xs: date

Complex type: A complex type is a container for other element definition. This allows you to specify which child elements an element can contain. and to provide some structure within your XML documents

Global types: Within the global type, you can define a single type in your document, which can be used by all other references

Q. Write diff b/w

① Cell padding and cell spacing

Cell padding is the amount of space between the outer edges of the table cell and the content of the cell.

Cell spacing is the amount of space in between the individual table cells

② Singular tag and paired tag

Singular tag: A singular tag does not have a companion tag or closing tag. for eg.
, <hr>

Paired tags: A tag is said to be a paired if the text is placed b/w a tag and its companion tag.

In paired tags, the first tag is referred to as opening tag and the second tag is referred to as closing tag

eg. <i> This text is in italics. </i>