1.History of HTML:

"In 1989, Tim Berners-Lee invented the World Wide Web (WWW), and proposed HTML (Hyper Text Markup Language) as the standard for creating web pages."

Detailed Timeline History of HTML:

At beginnings (1989-1991):

- **1989**: Tim Berners-Lee, a British scientist, proposed the idea of the World Wide Web while working at CERN.
- **WWW (World Wide Web)**: A system of interlinked hypertext documents accessed via the Internet,

HTML (1991-1993):

- **1989**: Tim Berners-Lee proposed the idea of the World Wide Web.
- **1990**: He developed the first web browser and web server.
- **1991**: HTML was publicly released and used to create the first websites.

HTML+:

- In 1993, Dave Raggett drafted HTML+, an extended version of HTML to support

  more complex documents.

HTML 2.0:

- **HTML 2.0**, defined by the **HTML Working Group** in **1995**, was the first official specification of HTML.
  It standardized features from earlier versions and supported basic elements like paragraphs, lists, forms, and tables.

HTML 3.2:

- **HTML 3.2**, released as a **W3C Recommendation in 1997**, was a significant update to HTML. It standardized many features already in use by browsers, including **tables**, **Java applets**, **text alignment**, and the use of **scripting languages** like JavaScript. This version marked the formal adoption of widespread web design practices of the time.

HTML 4.01(1999 W3C Recommendation):

- HTML 4.01, released as a **W3C Recommendation in 1999**, was an important update to HTML. It refined the structure of HTML documents and improved **support for style sheets (CSS),** accessibility, and internationalization**. HTML 4.01** came in three versions: Strict, Transitional, and Frameset.

XHTML 1.0 (2000 W3C Recommendation):

- **XHTML 1.0**, released as a **W3C Recommendation in 2000**, is a reformulation of HTML 4.01 using **XML (Extensible Markup Language)**. It combined the flexibility of HTML with the strictness of XML, requiring well-formed markup. XHTML 1.0 aimed to improve document structure and promote compatibility across future web technologies.

HTML5 (2008 WHATWG First Public Draft):

- In **2008**, the **Web Hypertext Application Technology Working Group (WHATWG)** published the **first public draft of HTML5**. This version aimed to modernize HTML by introducing features for **rich web applications**, such as **audio, video, canvas**, and better support for **semantics** and **offline storage**, while maintaining backward compatibility with older HTML versions.

WHATWG HTML5 Living Standard (2012):

- In **2012, the WHATWG (Web Hypertext Application Technology Working Group) redefined HTML5** as a Living Standard. This means HTML5 would no longer have fixed versioned releases but would be continuously updated to reflect changes in web technologies. The Living Standard ensures the web platform evolves with the needs of developers and users in real-time.

W3C Recommendation HTML5 (2014):

- In 2014, the **World Wide Web Consortium (W3C)** officially published **HTML5** as a W3C Recommendation, marking it as the finalized and stable version of HTML. HTML5 introduced native support for multimedia, semantics, and APIs**.**

HTML 5.1 (2016 W3C Candidate Recommendation):

- In 2016, **the W3C released HTML 5.1** as a Candidate Recommendation, introducing incremental improvements over HTML5..1 also added new elements and APIs to better support modern web applications.

HTML 5.1 2nd Edition *(2017 W3C Recommendation)*:

In 2017, the **W3C published HTML 5.1** 2nd Edition as a W3C Recommendation. served as a refined version of HTML 5.1, including minor corrections, clarifications, and bug fixes based on implementation feedback.

HTML5.2 (2017 W3C Recommendation):

In 2017, the W3C released HTML5.2 as a W3C Recommendation, marking the latest evolution of HTML. HTML5.2 introduced new features to improve security, accessibility, and interoperation.

2.Difference between html4 and html5 (Theoretical explanation)

HTML4 (released in 1999):

- Focused on document structure.
- Required plugins for audio, video, etc.
- Limited support for modern apps.
- Presentation was often done using HTML itself (not CSS).

HTML5 (finalized in 2014):

- Supports multimedia: audio, video, canvas.
- Introduced new semantic elements: <article>, <section>, etc.
- Improved form controls and APIs.
- Promotes separation of content and presentation (via CSS and JS).
- Mobile-friendly and designed for modern browsers.

Html	Html5
Doctype declaration in Html is too longer <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">	DOCTYPE declaration in Html5 is very simple "<!DOCTYPE html>
character encoding in Html is also longer <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">	character encoding (charset) declaration is also very simple <meta charset="UTF-8">
Vector Graphics is possible with the help of technologies such as VML, Silverlight, Flash etc	Vector graphics is integral part of HTML5 e.g. SVG and canvas
It is almost impossible to get true Geo Location of user browsing any website especially if it comes to mobile devices.	JS Geo Location API in HTML5 helps identify location of user browsing any website (provided user allows it)
Html5 use cookies.	It provides local storage in place of cookies.
Audio and Video are not part of HTML4	Audio and Videos are integral part of HTML5 e.g. <audio> and <video> tags.

Does not allow JavaScript to run in browser. JS runs in same thread as browser interface.	Allows JavaScript to run in background. This is possible due to JS Web worker API in HTML5
Works with all old browsers	Supported by all new browser.