**HTML (HyperText Markup Language)** and **XML (eXtensible Markup Language**) are markup languages, but they are designed for different purposes and have distinct differences.

**Differences between HTML and XML**

| **Feature** | **HTML** | **XML** |
| --- | --- | --- |
| **Purpose** | Used to create web pages and display data. | Designed to store and transport data. |
| **Structure** | Predefined set of tags (e.g., <p>, <div>). | User-defined tags for customized structure. |
| **Syntax** | Lenient; browsers often correct minor errors. | Strict; requires proper syntax and well-formed documents. |
| **Data Focus** | Focuses on how data is displayed (presentation). | Focuses on describing data (content). |
| **Tag Closure** | Not all tags require closure (e.g., <br>). | All tags must be properly closed. |
| **Attributes** | Attributes are predefined (e.g., href). | Attributes can be user-defined. |
| **Case Sensitivity** | Not case-sensitive (<DIV> is same as <div>). | Case-sensitive (<Data> and <data> are different). |
| **Usage** | Rendered by browsers for visual output. | Used for data interchange between systems. |

**HTML Example**

<!DOCTYPE html>

<html>

<head>

<title>HTML Example</title>

</head>

<body>

<h1> HTML</h1>

<p>This is a simple example of HTML.</p>

</body>

</html>

**XML Example**

<?xml version="1.0" encoding="UTF-8"?>

<bookstore>

<book>

<title> XML</title>

<author>Zarin Tasnim</author>

<price currency="EURO">29.99</price>

</book>

</bookstore>

**Key Observations in Examples:**

1. **HTML Example**:
   * Focuses on the presentation of content.
   * Tags like <h1> and <p> are predefined.
   * Some tags may not have a closing tag (e.g. <br>, <img>).
2. **XML Example**:
   * Focuses on the structure and meaning of data.
   * Tags like <book> and <price> are user-defined.
   * Every opening tag must have a closing tag or be self-closing.