What is XML?

XML was designed to transport and store data.
HTML was designed to display data.

- XML stands for EXtensible Markup Language
- XML is a markup language much like HTML
- XML was designed to carry data, not to display data
- XML tags are not predefined. You must define your own tags
- XML is designed to be self-descriptive
- XML is a W3C Recommendation

The Difference Between XML and HTML

XML is not a replacement for HTML.
XML and HTML were designed with different goals:

- XML was designed to transport and store data, with focus on what data is
- HTML was designed to display data, with focus on how data looks

HTML is about displaying information, while XML is about carrying information.

XML Does Not DO Anything

Maybe it is a little hard to understand, but XML does not DO anything. XML was created to structure, store, and transport information.
The following example is a note to Tove, from Jani, stored as XML:

```
<note>
      <to>Tove</to>
      <from>Jani</from>
      <heading>Reminder</heading>
      <body>Don't forget me this weekend!</body>
</note>
```

The note above is quite self descriptive. It has sender and receiver information, it also has a heading and a message body.
But still, this XML document does not DO anything. It is just information wrapped in tags. Someone must write a piece of software to send, receive or display it.

With XML You Invent Your Own Tags

The tags in the example above (like <to> and <from>) are not defined in any XML standard. These tags are "invented" by the author of the XML document.
That is because the XML language has no predefined tags.
The tags used in HTML are predefined. HTML documents can only use tags defined in the HTML standard (like <p>, <h1>, etc.).
XML allows the author to define his/her own tags and his/her own document structure.

XML is Not a Replacement for HTML

XML is a complement to HTML.
It is important to understand that XML is not a replacement for HTML. In most web applications, XML is used to transport data, while HTML is used to format and display the data.

My best description of XML is this:
XML is a software- and hardware-independent tool for carrying information.

XML is a W3C Recommendation

XML became a W3C Recommendation on February 10, 1998.

XML is Everywhere

XML is now as important for the Web as HTML was to the foundation of the Web.
XML is the most common tool for data transmissions between all sorts of applications.

Vocabulary

to store
to carry
replacement
goals
wrapped
sender
receiver

Questions:

1. What does XML stand for?
2. XML was designed to do?
3. What's the main HTML's goals?
4. What's the relationship between XML and information?
5. Are there any predefined tag in XML?
6. Are there any predefined tag in HTML? Examples.
7. Is XML going to replace HTML?
8. Could you imagine a situation where you need exchanges information between applications?
9. Write a simple XML document which describes the class schedule.