XML

- Html VS XML
- Rules for writing XML
- Comments
- Defining XML tags, attributes & values.
- Namespaces
- DTD
- XMLSchema
- DOM
- XHtml

} Html VS XHtml

Html	XML
Hyper text Markup Langue	Extensible Mark Up Language
It' used for presentations	It' used for transportation of data.
Html has its own pre defined tags	In XML, we've to create our own tags
Html is case insensitive	XML is case sensitive
In Html, some tags can be self ending tags.	In XML, each start tag must have an ending tag

(Q) Rules for writing XML:

1. XML is a case sensitive
   Ex: <hobby> and <Hobby> are two different elements.

2. In XML, each start tag must have an ending tag.
   <college> ... </college>

3. In XML, elements must be properly nested.

```
<college>
<department>CSE</department>
</college>
```

<one> <two> hi </one> </two>

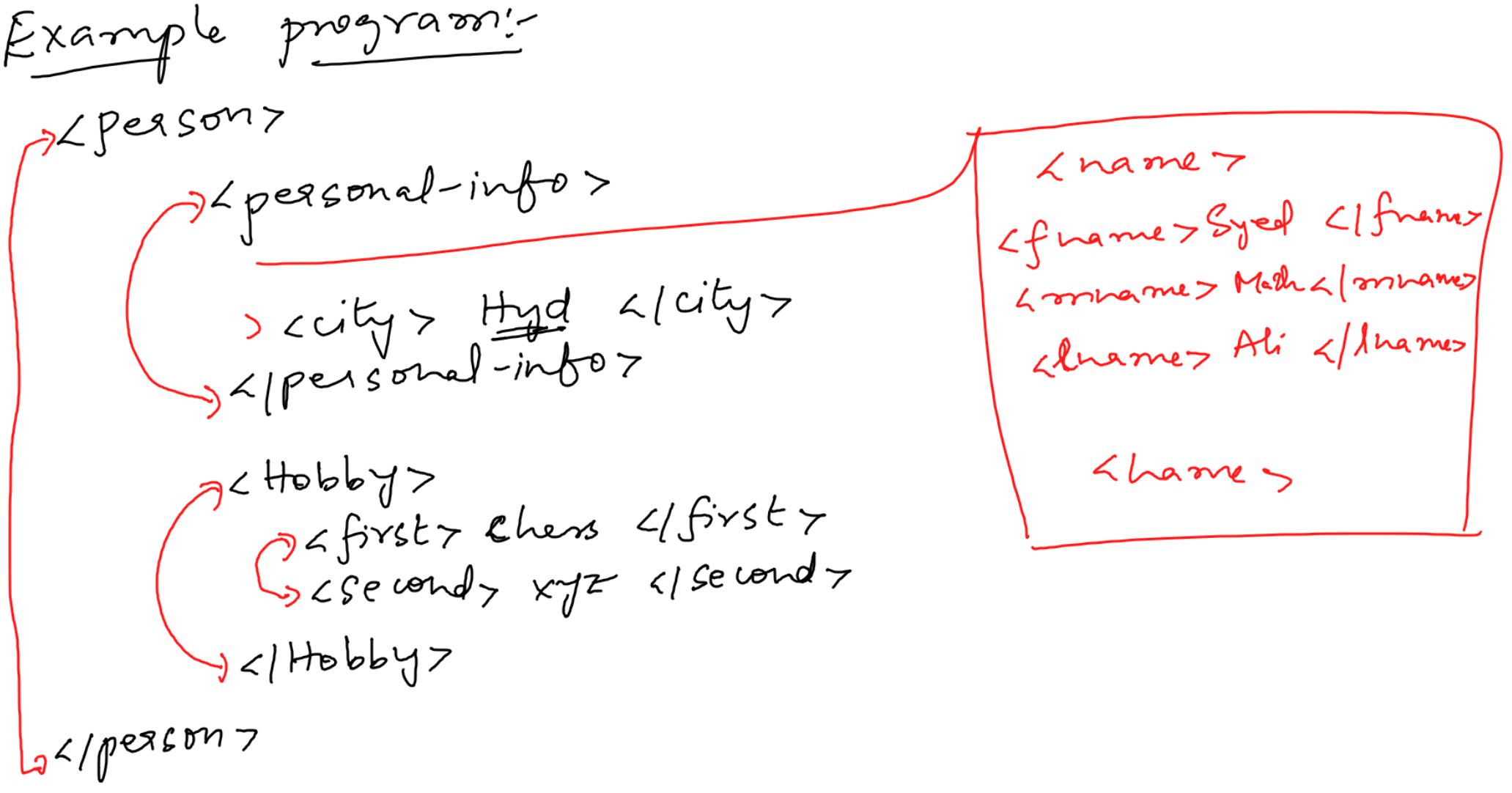
(Q) Comments in XML

i) Comments are not executed by XML parser.

ii) Comments improve readability

<!-- your comm -->

Example program:-



Namespaces.

- ✓ Sometimes we need to create two different elements with same name.
- ✓ The technique of creating two diffe elem with same name is called namespace.
- ✓ Two different elements means elements with diff. purposes.
- ✓ For this, we've to add an attribute.

Syntax:- attrName = "value"

Ex:- fname = "nagarani"

Ex:-

```
<File-Description>
    <text fname="abc">
        <describe> Hello </describe>
    </text>
    <text name="exy-txt">
        Hello
    </text>
</File-Description>
```

DTD

- DTD stands for Document Type Definition.
- It's used to define the basic building block of any XML document.
- Using DTD we can specify the various elements types, attributes and their relationship.

Various buildip blocks of XML:

1) Elements : Elements are used for defining tags.

2) Attribute : Attributes are used to give values to an element.

3) CDATA : It stands for character data. It will be parsed by the parser.

4) PCDATA : It stands for Parsed Character Data. These characters must not contain ~~<, > or &~~. use < > or &amp

Types of DTD

1. Internal DTD
2. External DTD

Internal DTD:-

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

<!DOCTYPE student
[
<!ELEMENT student (name, address, std, marks)>
<!ELEMENT name (#PCDATA)>
<!ELEMENT address (#PCDATA)>
<!ELEMENT std (#PCDATA)>
<!ELEMENT marks (#PCDATA)>
]>
```

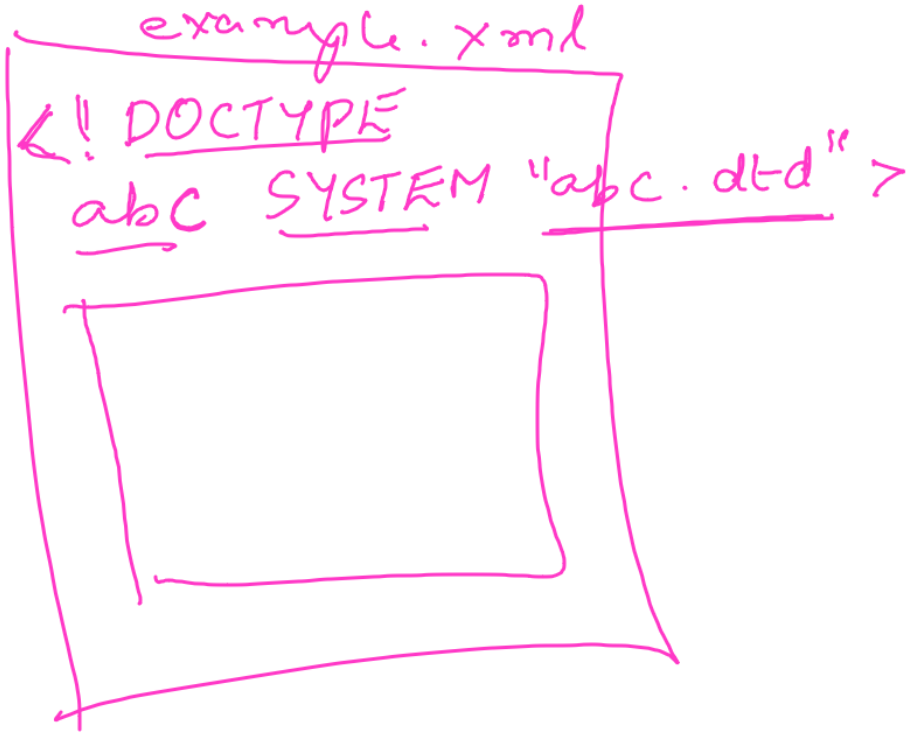
```
<student> ✓
    <name> Sharma </name>
    <address> A XYZ </address>
    <std> 123 </std>
    <marks> 999 </marks>

</student>
```

External DTD

abc.dtd

example.xml



Create DTD for your daily schedule.

```
<? xml version = "1.0"
      encodig = "UTF-8" ?>

<! DOCTYPE dailyschedule
[
<!ELEMENT dailyschedule(weekdays, weekends) ?
<!ELEMENT weekdays(monda, T... ) >
<!ELEMENT weekends ( sat, sun) >
<!ELEMENT monday (#PCDATA) >
<!ELEMENT
   :
   -

]>
```