Assignment

List :- A List is simply a sequence of related items (eg: to-do list (or) organizing (or) remembering list) organized together for clarity and easy reference

In HTML:

HTML provides three types of lists:

→ Unordered (<ul>) – presents bullet points when items order doesn't matter

→ Ordered (<ol>) – adds numbering when sequence is important

→ Description (<dl>) – pairs items (<dt>) with definitions (<dd>). Each item uses <li> inside <ul> or <ol> or <dl> to define content

In Python:

A list is a builtin collection type that:

→ Is ordered – items maintain insertion order and support indexing/slicing

→ Is mutable – you can modify, add, remove or sort items in-place.

→ can hold heterogenous data – strings, numbers, other lists, etc

In XML's

In XML, there is no built-in "list" data type like in programming languages, but you can repre-sent lists using custom tags and repeated elements to simulate list behavior.

How Lists are created in XML:

1. Repeated elements (flat List)

2. Nested Lists.

3. Delimited values

Here, a list is stored as a string with commas. This is not recommended for complex data.

→ XML focuses on data structure, not data types.

→ Lists are interpreted by parsers or applications reading the XML

→ for proper list handling, its best to repeat child elements under a parent tag.

Ex:① Flat Lists:-

```
<fruits>
    <fruit> Apple </fruit>
    <fruit> Mango </fruit>
    <fruit> Banana </fruit>
</fruits>
```

② Nested Lists:

```
<departments>
  <department>
    <name> Sales
    <employee> John </employee>
    <employee> Jane </employee>
  </department>
</departments>
```

③ Delimited Values.

```
<colors> Red, Blue, Green </colors>:
```