



DEPARTMENT OF  
COMPUTER SCIENCE AND ENGINEERING

---

**Title: Using HTML tags to create Lists**

---

WEB PROGRAMMING LAB  
CSE 302



GREEN UNIVERSITY OF BANGLADESH

---

# 1 Objective(s)

- What are unordered and ordered HTML Lists?
- Reinforce our understanding of unordered lists through creation
- Introduce the ordered list tag
- Reinforce our understanding of ordered lists through creation

## 2 Problem analysis

Many HTML tags behave in unique ways. Some apply automatic styling, like p tags that create margins around text. Some, like the header tags, increase the font size. Using these tags delineates our content. When reading HTML, using the correct tags informs us of what the content's purpose is. If we see an h1 tag, we know that we're looking at a big page header. In this lesson, we're going to be looking at a few new tags that help us organize lists of related content.

Using the built in ul, ol and li HTML tags however, we can group related list content together. We call such a grouping a "list."

- In HTML, we create lists using the <ul> tag, which stands for unordered list, along with the <li> tag for each list item.
- To make a list, we write out the opening and closing <ul> tags, and inside them, we'll add <li> tags, each listing a single ingredient.
- If we wanted convert it to a list, it would look like, instead of just having each item show up on a new line, the content will also be slightly indented and a bullet will appear next to each of them.
- In situations where we want items to be displayed in a specific, numbered order, we will want to use the ordered list tag, which is written as <ol> instead of <ul>. Both use <li> tags inside, but this time, <ol> will display a numbered list instead of bullets.

## 3 Implementation in HTML

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <meta charset="UTF-8">
5     <meta http-equiv="X-UA-Compatible" content="IE=edge">
6     <meta name="viewport" content="width=device-width, initial-scale=1.0">
7     <title>List Experiment</title>
8 </head>
9 <body>
10     <h2>Unorder List Example: </h2>
11
12     <ul>
13         <li>Ham and Cheese</li>
14         <li>Grilled Cheese</li>
15         <li>Nacho Cheese French Fries</li>
16         <li>Cheese soup</li>
17         <li>Cheese and crackers</li>
18         <li>Sushi</li>
19     </ul>
20
21     <h2>Order List Example:</h2>
22     <ol>
23         <li>Grilled Cheese</li>
24         <li>Sushi</li>
```

---

```

25     <li>Cheese and crackers</li>
26     <li>Cheese soup</li>
27     <li>Nacho Cheese French Fries</li>
28 </ol>
29
30 <h3>Nested lists inside of Unorderlists</h3>
31     <ul>
32         <li>Sandwiches
33             <ul>
34                 <li>Ham and Cheese</li>
35                 <li>Grilled Cheese</li>
36             </ul>
37         </li>
38         <li>Snacks
39             <ul>
40                 <li>Nacho Cheese French Fries</li>
41                 <li>Cheese and crackers</li>
42             </ul>
43         </li>
44         <li>Soups
45             <ul>
46                 <li>Cheese soup</li>
47             </ul>
48         </li>
49         <li>Sushi
50             <ul>
51                 <li>Spicy Salmon Rolls</li>
52                 <li>California Rolls</li>
53             </ul>
54         </li>
55     </ul>
56
57 <h3>Nested lists inside of Order lists</h3>
58 <ol>
59     <li>Sandwiches
60 <ol>
61     <li>Ham and Cheese</li>
62     <li>Grilled Cheese</li>
63 </ol>
64 </li>
65 <li>Snacks
66 <ol>
67     <li>Nacho Cheese French Fries</li>
68     <li>Cheese and crackers</li>
69 </ol>
70 </li>
71 <li>Soups
72 <ol>
73     <li>Cheese soup</li>
74 </ol>
75 </li>
76 <li>Sushi
77 <ol>
78     <li>Spicy Salmon Rolls</li>
79     <li>California Rolls</li>
80 </ol>
81 </li>
82 </ol>

```

```
83 </body>
84 </html>
```

## 4 Input/Output

Output of the program is given below.

### Unorder List Example:

- Ham and Cheese
- Grilled Cheese
- Nacho Cheese French Fries
- Cheese soup
- Cheese and crackers
- Sushi

### Order List Example:

1. Grilled Cheese
2. Sushi
3. Cheese and crackers
4. Cheese soup
5. Nacho Cheese French Fries

### Nested lists inside of Unorderlists

- Sandwiches
  - Ham and Cheese
  - Grilled Cheese
- Snacks
  - Nacho Cheese French Fries
  - Cheese and crackers
- Soups
  - Cheese soup
- Sushi
  - Spicy Salmon Rolls
  - California Rolls

### Nested lists inside of Order lists

1. Sandwiches
  1. Ham and Cheese
  2. Grilled Cheese
2. Snacks
  1. Nacho Cheese French Fries
  2. Cheese and crackers
3. Soups
  1. Cheese soup
4. Sushi
  1. Spicy Salmon Rolls
  2. California Rolls

Figure 1: Unorder, order and nested list item using HTML

## 5 Discussion & Conclusion

Lists in HTML are useful for organizing related content. In basic html, they're our go-to way to indicate that content is related. Using unordered lists is useful for more than just listing favorite foods. For example, we can use list elements to organize navigation links, like in a menu bar. With styling, we can remove the bullets, make

---

items line up horizontally, and make the list 'look good'. In our HTML, the list will be organized and easy to read.

## 6 Lab Task (Please implement yourself and show the output to the instructor)

Now students are requested to develop a web-page using notepad++ and HTML tags for lists and submit a lab report

### 6.1 Problem analysis

By default, the list items in an ordered list begin with a number. To change the way list items are numbered, `<ol>` tag has an attribute "type", through which list items can have numbers, roman numerals, or alphabets. The type attribute has defined values which are shown below:

- 1 – Numbers (1, 2, 3, 4, 5, 6...)
- a – Lowercase Alphabets (a, b, c, ...)
- A – Uppercase Alphabets (A, B, C, ...)
- i – Lowercase Roman Numerals (i, ii, iii, iv, ....)
- I – Uppercase Roman Numerals (I, II, III, IV, ....)

### 6.2 Sample output

#### Ordered List Tag with Type Attribute Lower Case Alphabets

```
a. Dhaka  
b. Khulna  
c. Chittagong  
d. Cox's Bazar
```

#### Ordered List Tag with Type Attribute Upper Case Alphabets

```
A. Dhaka  
B. Khulna  
C. Chittagong  
D. Cox's Bazar
```

#### Ordered List Tag with Type Attribute Lower Case Roman

```
i. Dhaka  
ii. Khulna  
iii. Chittagong  
iv. Cox's Bazar
```

#### Ordered List Tag with Type Attribute Upper Case Roman

```
I. Dhaka  
II. Khulna  
III. Chittagong  
IV. Cox's Bazar
```

#### This is the demonstration of Ordered List where the List Items starts with 4

```
4. Dhaka  
5. Khulna  
1. Chittagong  
2. Cox's Bazar
```

#### This is the demonstration of Definition List

```
AP    Dhaka  
KA    Khulna  
TS    Chittagong  
UP    Cox's Bazar
```

Figure 2: Sample list

---

## 7 Lab Exercise (Submit as a report)

- Implement type attribute using HTML.
- Implement definition list using HTML

## 8 Policy

Copying from internet, classmate, seniors, or from any other source is strongly prohibited. 100% marks will be *deducted* if any such copying is detected.