

Front End Technologies

CSS - Day 9

Agenda

- Pseudo classes continued



Combining first-child and last-child pseudo class:

Example:

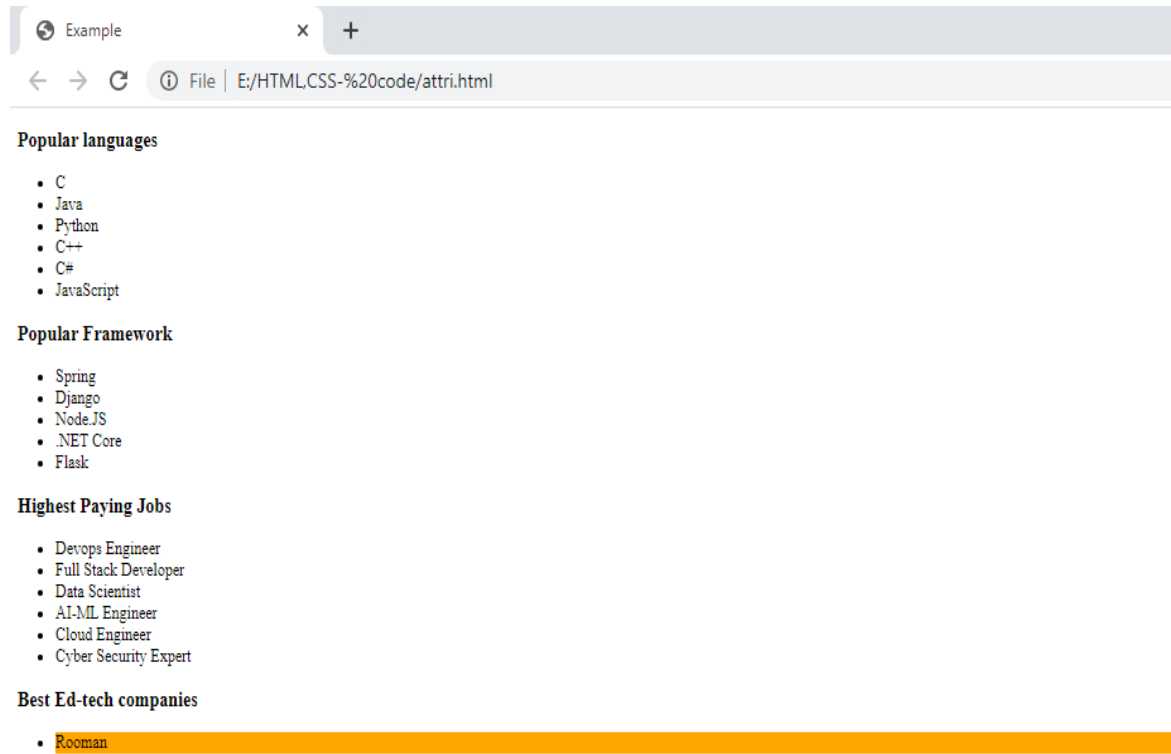
index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Example</title>
  <link rel="stylesheet" type="text/css" href="index.css">
</head>
<body>
  <div>
    <h3>Popular languages</h3>
    <ul>
      <li>C</li>
      <li>Java</li>
      <li>Python</li>
      <li>C++</li>
      <li>C#</li>
      <li>JavaScript</li>
    </ul>
  </div>
  <div>
    <h3>Popular Framework</h3>
    <ul>
      <li>Spring</li>
      <li>Django</li>
      <li>Node.JS</li>
      <li>.NET Core</li>
      <li>Flask</li>
    </ul>
    <h3>Highest Paying Jobs</h3>
    <ul>
      <li>Devops Engineer</li>
      <li>Full Stack Developer</li>
      <li>Data Scientist</li>
      <li>AI-ML Engineer</li>
      <li>Cloud Engineer</li>
      <li>Cyber Security Expert</li>
    </ul>
    <h3>Best Ed-tech companies</h3>
    <ul>
      <li>Rooman</li>
    </ul>
  </div>
</body>
</html>
```

index.css

```
li:first-child:last-child{  
    background-color: orange;  
}
```

Output:



In this example, only-child is selected using first-child and last-child pseudo class because only child is nothing but first and last child.

Example: Style the odd and even elements in the list using nth-child pseudo class

index.html

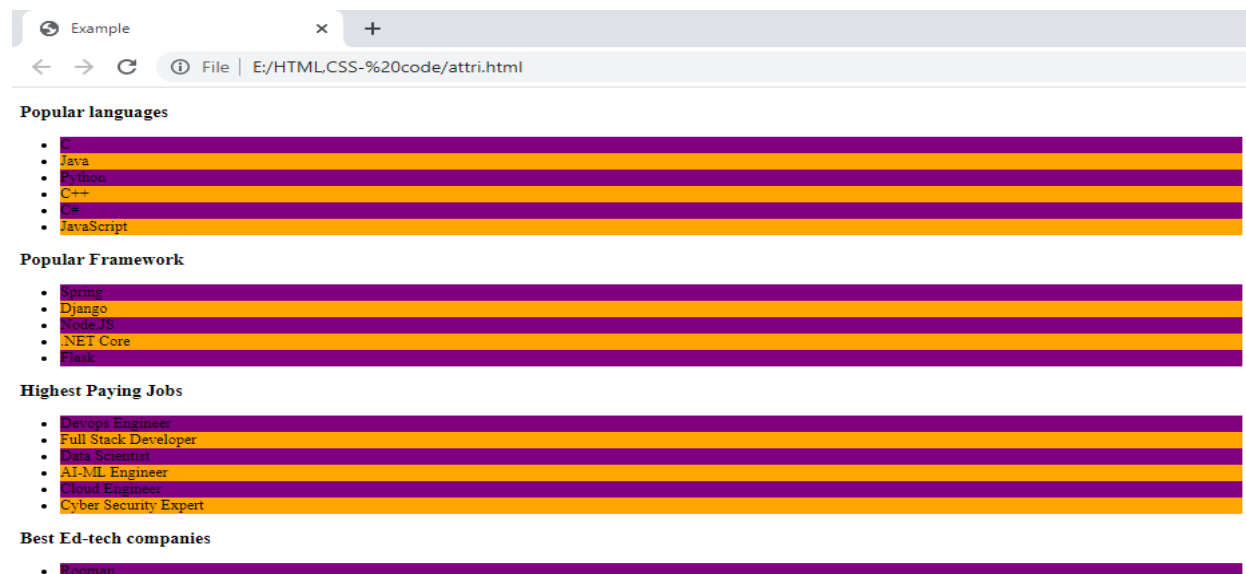
```
<!DOCTYPE html>
<html>
<head>
  <title>Example</title>
  <link rel="stylesheet" type="text/css" href="index.css">
</head>
<body>
  <div>
    <h3>Popular languages</h3>
    <ul>
      <li>C</li>
      <li>Java</li>
      <li>Python</li>
      <li>C++</li>
      <li>C#</li>
      <li>JavaScript</li>
    </ul>
  </div>
  <div>
    <h3>Popular Framework</h3>
    <ul>
      <li>Spring</li>
      <li>Django</li>
      <li>Node.JS</li>
      <li>.NET Core</li>
      <li>Flask</li>
    </ul>
    <h3>Highest Paying Jobs</h3>
    <ul>
      <li>Devops Engineer</li>
      <li>Full Stack Developer</li>
      <li>Data Scientist</li>
      <li>AI-ML Engineer</li>
      <li>Cloud Engineer</li>
      <li>Cyber Security Expert</li>
    </ul>
    <h3>Best Ed-tech companies</h3>
    <ul>
      <li>Rooman</li>
    </ul>
  </div>
</body>
</html>
```

index.css

```
li:nth-child(2n){
  background-color: orange;
}

li:nth-child(2n+1){
  background-color: purple;
}
```

Output:

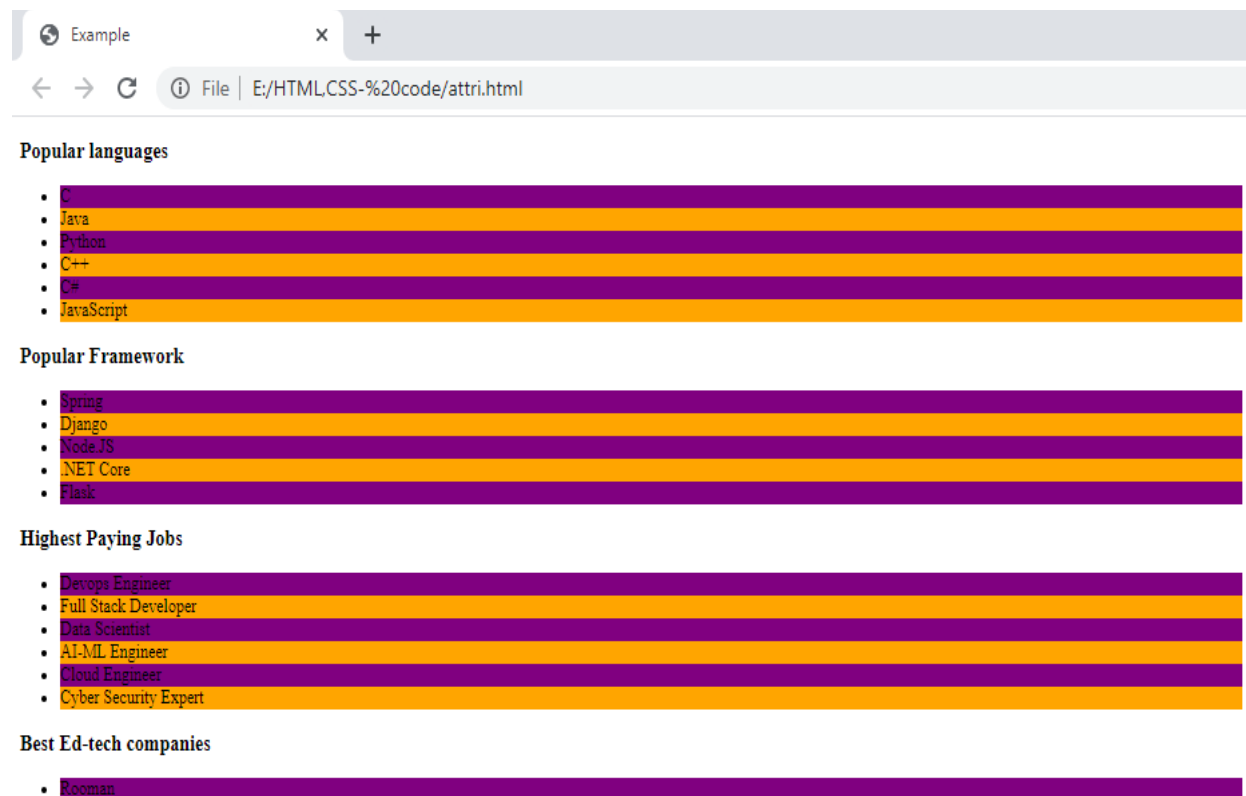


Here, `nth-child(2n)` will select all list items with even index numbers(2, 4, 6..etc) and `nth-child(2n + 1)` will select all list items with odd index numbers(1, 3, 5..etc). Instead of saying $2n$ and $2n + 1$ in general you can say as even and odd as shown in below example.

index.css

```
li:nth-child(even){  
    background-color: orange;  
}  
  
li:nth-child(odd){  
    background-color: purple;  
}
```

Output:

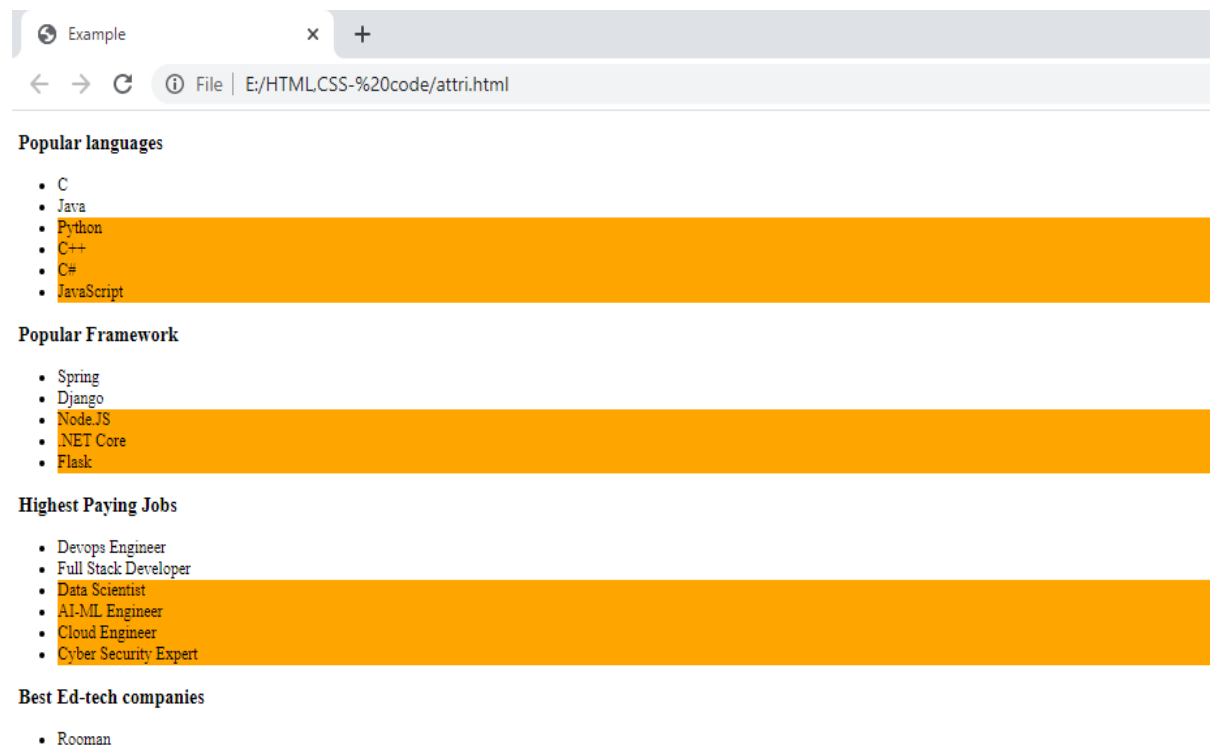


Example: Select range of values using nth-child

Index.css

```
li:nth-child(n + 3){  
    background-color: orange;  
}
```

Output:



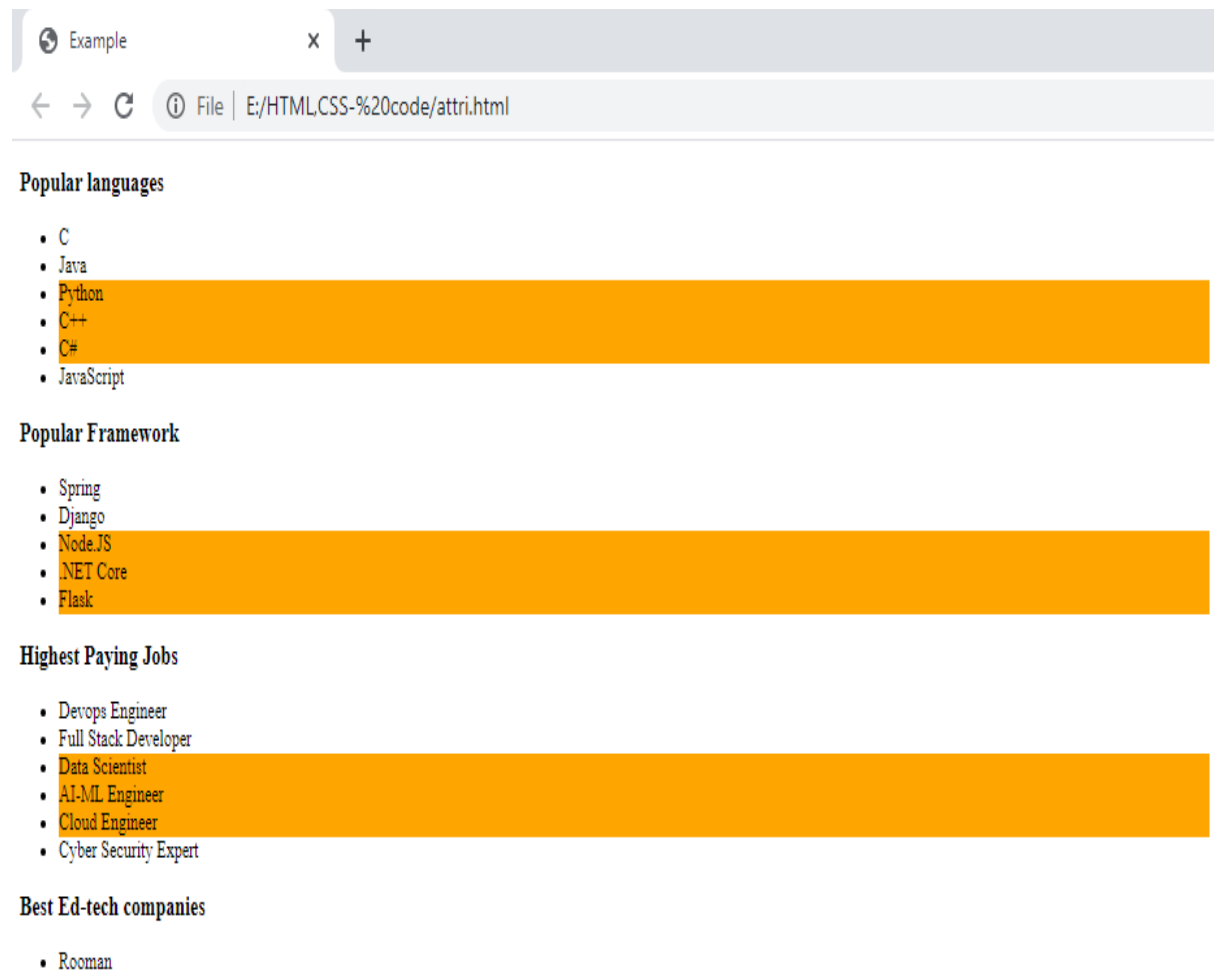
In this example, $(n + 3)$ selects every row starting from 3. If you want to select every row starting from 5 means you can write as $(n + 5)$.

Example: Selecting the values from 3rd index to 5th index.

index.css

```
li:nth-child(n + 3):nth-child(-n + 5){  
    background-color: orange;  
}
```

Output:



In this example, we have applied 2 nth-child selectors to one-group of siblings.

Only-of-type: only-of-type selector in CSS represents only those element that has no siblings of the given type.

Example:

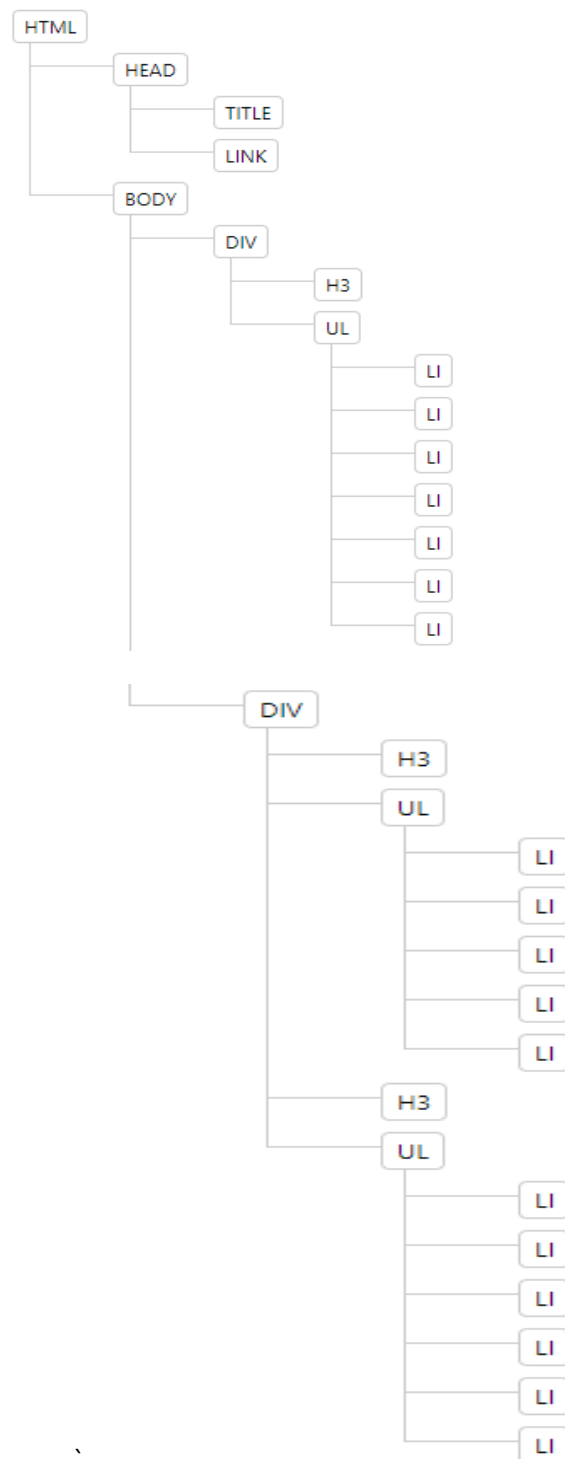
index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Example</title>
  <link rel="stylesheet" type="text/css" href="index.css">
</head>
<body>
  <div>
    <h3>Popular languages</h3>
    <ul>
      <li>Perl</li>
      <li>C</li>
      <li>Java</li>
      <li>Python</li>
      <li>C++</li>
      <li>C#</li>
      <li>JavaScript</li>
    </ul>
  </div>
  <div>
    <h3>Popular Framework</h3>
    <ul>
      <li>Spring</li>
      <li>Django</li>
      <li>Node.JS</li>
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      <li>Flask</li>
    </ul>
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      <li>Data Scientist</li>
      <li>AI-ML Engineer</li>
      <li>Cloud Engineer</li>
      <li>Cyber Security Expert</li>
    </ul>
  </div>
</body>
</html>
```

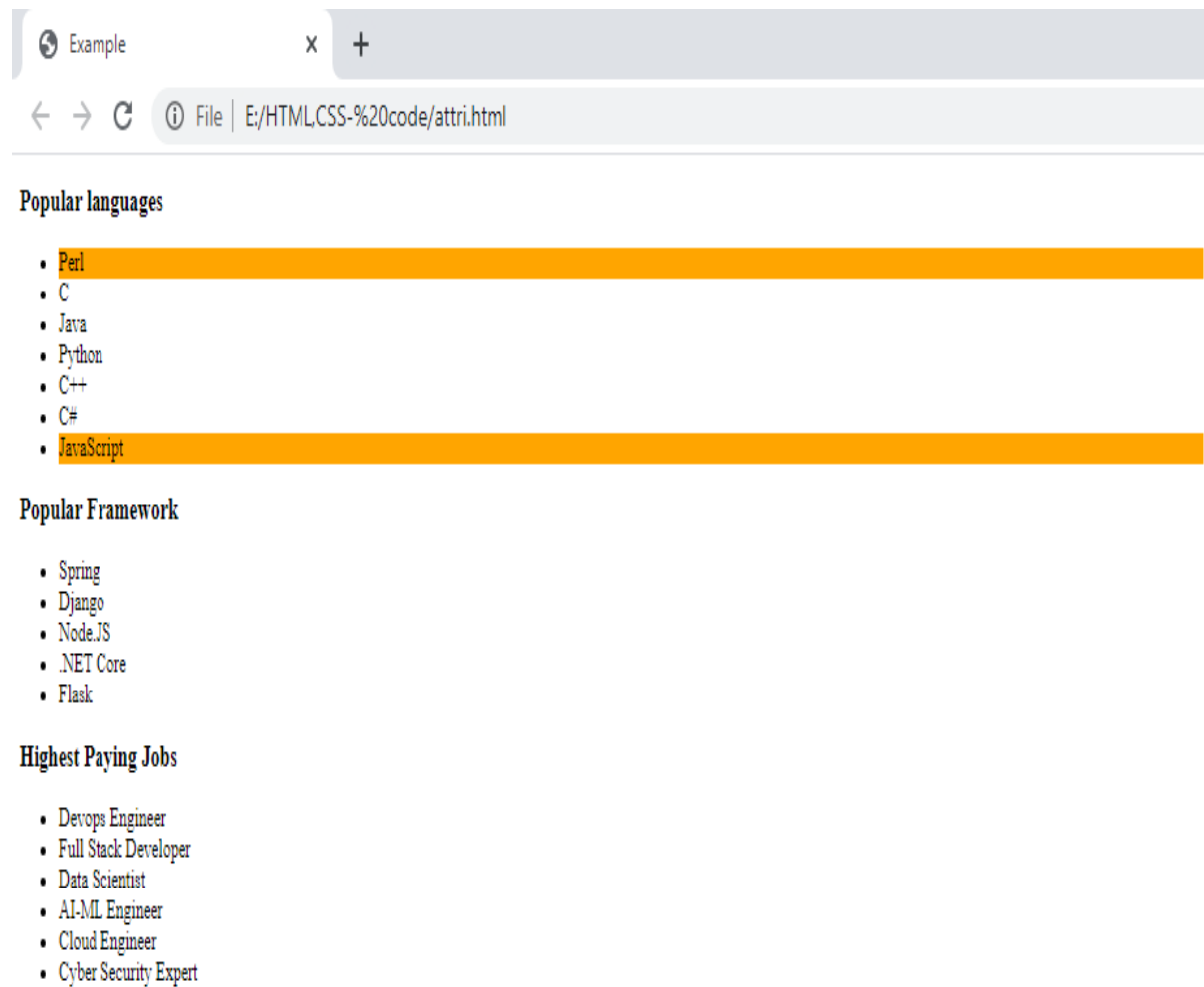
Index.css

```
ul:only-of-type > li:first-child,
ul:only-of-type > li:last-child{
  background-color: orange;
}
```

Tree Representation:



Output:



In this example, styling is applied to first and last li present inside first ul. Only-of-type is used to select first ul, first-child and last-child is used to select first and last li inside ul.

first-of-type: first-of-type pseudo-class selects an element that is the first element of its type in the list of children of its parent. Let's understand first-of-type pseudo class with an example.

Example:

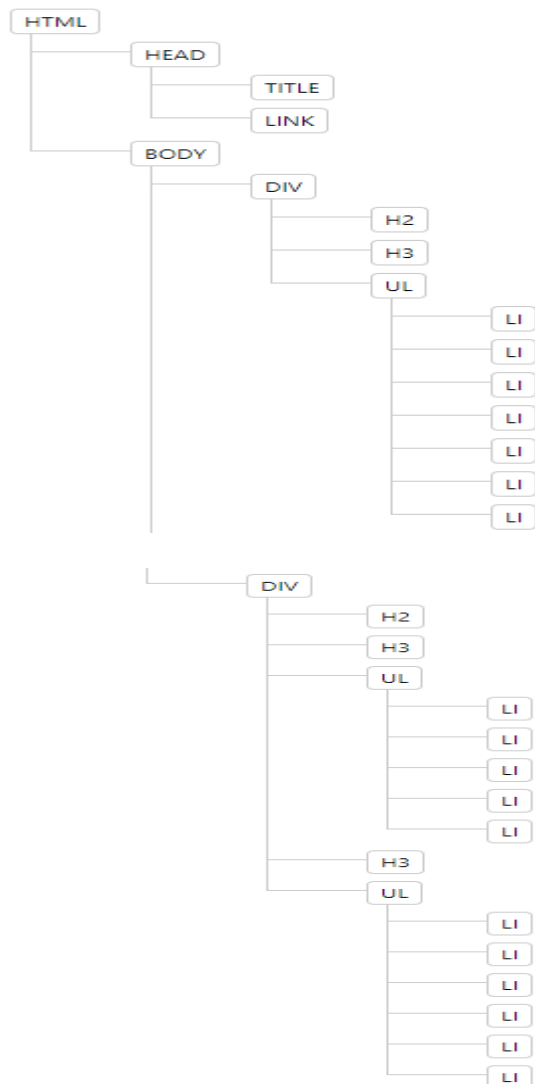
index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Example</title>
  <link rel="stylesheet" type="text/css" href="index.css">
</head>
<body>
  <div>
    <h2>Dummy H2</h2>
    <h3>Popular languages</h3>
    <ul>
      <li>Perl</li>
      <li>C</li>
      <li>Java</li>
      <li>Python</li>
      <li>C++</li>
      <li>C#</li>
      <li>JavaScript</li>
    </ul>
  </div>
  <div>
    <h2>Dummy H2</h2>
    <h3>Popular Framework</h3>
    <ul>
      <li>Spring</li>
      <li>Django</li>
      <li>Node.JS</li>
      <li>.NET Core</li>
      <li>Flask</li>
    </ul>
    <h3>Highest Paying Jobs</h3>
    <ul>
      <li>Devops Engineer</li>
      <li>Full Stack Developer</li>
      <li>Data Scientist</li>
      <li>AI-ML Engineer</li>
      <li>Cloud Engineer</li>
      <li>Cyber Security Expert</li>
    </ul>
  </div>
</body>
</html>
```

index.css

```
div > ul:first-of-type{
  background-color: violet;
}
```

Tree representation:



Output:

Example

File | E:/HTML/CSS-%20code/attri.html

Dummy H2

Popular languages

- Perl
- C
- Java
- Python
- C++
- C#
- JavaScript

Dummy H2

Popular Framework

- Spring
- Django
- Node.JS
- .NET Core
- Flask

Highest Paying Jobs

- Devops Engineer
- Full Stack Developer
- Data Scientist
- AI-ML Engineer
- Cloud Engineer
- Cyber Security Expert

Example: Styling of list inside ul using first-of-type, last-of-type and nth-of-type

Index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Example</title>
  <link rel="stylesheet" type="text/css" href="index.css">
</head>
<body>
  <div>
    <ul>
      <li>A</li>
      <li>B</li>
      <li>C</li>
      <li>D</li>
    </ul>

    <ul>
      <li>A</li>
      <li>B</li>
      <li>C</li>
      <li>D</li>
    </ul>

    <ul>
      <li>A</li>
      <li>B</li>
      <li>C</li>
      <li>D</li>
    </ul>
  </div>
  <div>
    <ul>
      <li>One</li>
      <li>Two</li>
      <li>Three</li>
      <li>Four</li>
    </ul>

    <ul>
      <li>One</li>
      <li>Two</li>
      <li>Three</li>
      <li>Four</li>
    </ul>

    <ul>
      <li>One</li>
      <li>Two</li>
      <li>Three</li>
      <li>Four</li>
    </ul>
  </div>
</body>
</html>
```

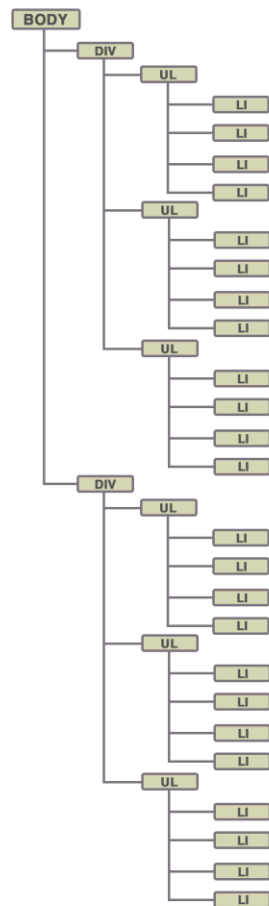
Index.css

```
div > ul:first-of-type{
  background-color: violet;
}

div > ul:last-of-type{
  background-color: orange;
}

div > ul:nth-of-type(2){
  background-color: grey;
}
```

Tree representation:



Output:



Example: Styling of even and odd ul inside the div. (refer index.html f above example)

index.css

```
div > ul:nth-of-type(2n){  
    background-color: grey;  
}  
  
div > ul:nth-of-type(2n + 1){  
    background-color: violet;  
}
```

Or

```
div > ul:nth-of-type(even){  
    background-color: grey;  
}  
  
div > ul:nth-of-type(odd){  
    background-color: violet;  
}
```

Output:

