Batch 2 - CSS Box Model & Margin (Class Notes)

1) What is CSS Box Model?

- Every HTML element is treated as a rectangular box in CSS.

- Box model defines how size & spacing of element is calculated.

Box Model Parts (inside to outside):

1. Content - actual text/image/content

2. Padding - space between content & border

3. Border - thickness/line around element

4. Margin - space outside border (between elements)

2) Box Model Structure (Diagram Style)

[Content] inside -> Padding -> Border -> Margin outside

3) Margin Definition

- Margin = outer space of element (outside the border).

- Creates gap between elements.

- Transparent (no color).

Example:

```
div {
  margin: 20px;   /* equal space all sides */
}
```

Shorthand:

```
margin: 10px 20px 30px 40px;
/* top, right, bottom, left */
```

4) Full Code Example - Box Model in Action

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Box Model Example</title>
  <style>
    .box {
      width: 200px;
      height: 100px;
      background-color: lightblue;

      /* Box model properties */
      padding: 20px;        /* space inside box */
      border: 5px solid blue; /* border thickness */
      margin: 30px;         /* space outside box */
    }
  </style>
</head>
<body>
```

```
<div class="box">Hello Batch 2</div>

<div class="box">Second Box</div>


</body>

</html>
```

5) Interview-Style Q&A

Q1: What is CSS Box Model?

-> Box model explains how every HTML element is treated as a rectangular box consisting of content, padding, border, and margin.

Q2: Difference between Padding and Margin?

-> Padding = inside element (between content & border).

-> Margin = outside element (space between elements).

Q3: Why margin is important?

-> To create spacing between elements without affecting their internal content.

Q4: What happens if we increase border or padding?

-> It increases total element size (unless box-sizing: border-box is used).

Key Takeaway:

- Box model = Content + Padding + Border + Margin.

- Margin = outer spacing separates elements.

- Padding = inner spacing pushes content inside border.