Understanding `float` and `clear` in CSS

The `float` Property

- **Purpose:** The `float` property in CSS allows elements (most commonly images or small boxes) to be pushed to the left or right of their container, letting text and inline elements wrap around them.
- **Values:**
  - `left` – Floats the element to the left.
  - `right` – Floats the element to the right.
  - `none` – Default, no floating.
  - `inherit` – Inherits from parent.

Example Usage:

```css
img.left-img {
  float: left;
  margin-right: 12px;
}
```

The image will align to the left and any text will flow around its right side.

Common Uses for `float`

- Wrapping text around images.
- Creating horizontal navigation bars (before Flexbox/Grid).
- Sidebars or columns in layouts.

Visual Behavior:

- The floated element is removed from the normal document flow but remains part of the page.
- Other block-level elements will ignore the floated element's space (they'll behave as if the float is not there).

The `clear` Property

- **Purpose:** The `clear` property is used to control the behavior of elements *after* floated elements—usually to prevent them from wrapping around a previous float.
- **Values:**
  - `left` – No floating elements allowed on the left.

- `right` – No floating elements allowed on the right.

- `both` – No floats allowed on either side (most common for clearing).

- `none` – Default, allows floating elements on both sides.

Example Usage:

```css
.clearfix {
  clear: both;
}
```

A `<div>` with this class will move below any preceding floats, appearing in a new line beneath them.

Table: Key Differences and Usage

Property	What It Does	Common Values	Typical Use Case
float	Shifts element left/right, allows text wrap	left, right	Image/text wrapping, layouts
clear	Prevents element from sitting next to floats	left, right, both	Clearing floats, layout fixes

Practical Example

```html
<img src="cat.jpg" style="float:left; width:120px; margin:8px;">
<p>Lorem ipsum dolor sit amet…</p>
<div style="clear:both;"></div>
<footer>This footer starts below the floated image.</footer>
```

The `<img>` floats left, the paragraph text wraps around it, and the `<footer>` begins below both, thanks to the clear fix.

Summary

- Use `float` to let elements align left or right and have text flow around them.

- Use `clear` to stop elements from appearing beside floated elements, ensuring proper stacking and page layout.
  These classic tools are still useful, though modern CSS layout techniques often use Flexbox or Grid for more complex designs.