DOM Day 1: Basics & Mini Project

■ Day 1 – DOM Basics (Fast-Track)

1■■ What is the DOM?
DOM = Document Object Model → A tree structure of your HTML page.
Every tag = a node (element, text, attribute).
JavaScript can read, modify, and delete these nodes dynamically.

2■■ Selecting Elements (Core Skills)

```
document.getElementById("idName");        // Selects 1 element by ID
document.getElementsByClassName("cls"); // HTMLCollection (like array)
document.getElementsByTagName("p");      // All <p> tags
document.querySelector(".myclass");      // First match
document.querySelectorAll("li");         // NodeList (all matches)
```
■ Best practice → use querySelector & querySelectorAll.

3■■ Changing Text, HTML, Attributes, Styles

```
const title = document.querySelector("#title");

// Change text
title.textContent = "Hello DOM!";
title.innerHTML = "<span style='color:red'>Hi DOM</span>";

// Change attribute
title.setAttribute("class", "highlight");

// Change style
title.style.color = "blue";
title.style.fontSize = "22px";
```

4■■ Creating & Appending Elements

```
const div = document.createElement("div");
div.textContent = "I was created using DOM!";
div.style.padding = "10px";
div.style.backgroundColor = "lightgreen";

// Add to page
document.body.appendChild(div);
```

5■■ Removing Elements

```
const oldElement = document.querySelector("#old");
oldElement.remove();   // deletes it
```