🟣 Dark Mode in Tailwind CSS v4

📘 What is Dark Mode?

Dark mode is a design style that uses a darker color palette for UI elements. Tailwind makes it easy to implement dark themes using utility classes prefixed with dark:.

🔹 1. Write Basic Code (Light Mode)

Here's a simple HTML section in light mode:

```
<div class="bg-white text-black p-6 rounded shadow-md">

 <h1 class="text-xl font-bold">Welcome to Light Mode</h1>

 <p>This is a basic container in light mode.</p>

</div>
```

🔹 2. Update This Code for Dark Mode

Tailwind uses class-based dark mode by default in v4. To use it, you simply add the dark: prefix to your classes and set a class="dark" on the parent.

✅ Example with Light and Dark Mode:

```
<!-- Manually toggle dark mode by adding 'dark' class on <html> or <body> -->

<body class="dark:bg-gray-900 dark:text-white bg-white text-black p-10">

 <div class="bg-white dark:bg-gray-800 text-black dark:text-white p-6 rounded shadow-md">

  <h1 class="text-xl font-bold">Dark Mode Enabled</h1>

  <p>This block supports light and dark themes.</p>

 </div>

</body>
```

🔹 3. Test Dark Mode with Operating System Mode

Tailwind v4 also supports media-query-based dark mode using your operating system preference.

🛠 To enable this, set the darkMode to 'media' (only needed if using a config file, which is optional in v4).

✅ With no config file — Tailwind v4 handles it automatically:

Use dark: classes and test by switching your OS to dark mode.

```
<!-- Just add dark classes, Tailwind v4 auto-detects OS mode -->
<div class="bg-white dark:bg-black text-black dark:text-white p-6 rounded">
  Auto switches with OS mode
</div>
```

Note: In Tailwind v4 CLI setup without config, dark mode defaults to class strategy, so if you want OS-based switching, you must:

- either write a minimal tailwind.config.js with darkMode: 'media'
- or toggle manually using JavaScript.

◆ 4. Using Dark Mode Toggle (Optional Bonus)

You can toggle dark mode using JavaScript by switching the dark class on the <html> or <body> tag.

✅ Example Toggle Button:

```
<button onclick="document.body.classList.toggle('dark')"
  class="bg-blue-500 text-white px-4 py-2 rounded">
  Toggle Dark Mode
</button>
```

💡 Interview Questions & Answers

Question	Answer
How to enable dark mode in Tailwind v4?	Use dark: prefix and apply dark class on <html> or <body>.
What is the default strategy in Tailwind v4 for dark mode?	class strategy is default in v4 CLI setup (uses dark: with manual toggle).

Question	Answer
How to test dark mode with OS theme?	Just add dark: classes and switch your OS to dark theme. No config needed.
Can dark mode be toggled manually?	Yes, by adding/removing dark class via JavaScript.
Is tailwind.config.js required for dark mode in v4?	Not required unless customizing behavior (media vs class strategy).