HTML, CSS and JavaScript Exercises

HTML Exercises

1. **Create a Webpage with Headlines**
   Create a webpage that includes an <h1>, <h3>, and <h6> headline.
   Use them to display a topic and its subtopics.

2. **Add a Paragraph and a Div**
   Add a paragraph <p> describing your favorite hobby and a <div> explaining why you enjoy it.

3. **Use a Span for Emphasis**
   Write a sentence about your favorite food and use a <span> to bold the name of the food.

4. **Create a Bullet and Numbered List**
   Make a webpage with a bullet list <ul> of three of your favorite movies and a numbered list <ol> of three of your favorite books.

5. **Insert a Horizontal Line**
   Add a horizontal line <hr> to separate two sections of your webpage.
   Style one of the lines to be red and thicker.

6. **Build a Simple Table**
   Create a table <table> with two rows and two columns.
   Fill it with the names of flowers and their sizes (e.g., Roses - Small, Tulips - Large).

7. **Add a Link to Another Page**
    Add a link <a> to your webpage that redirects to a page about your favorite animal.

8. **Display an Image with a Caption**
   Insert an image <img> of a landscape and add a caption <figcaption> describing it.

9. **Add a Marquee**
   Create a scrolling marquee <marquee>
   on your webpage that displays the text "Welcome to my website!"

10. **Embed a Video**
    Add a video <iframe> to your webpage about your favorite topic.
    Include a caption <figcaption> describing the video.

CSS Exercises

11. **Change the Background Color**
    Use CSS to change the background color of your webpage to light blue.

12. **Style the Headlines**
    Change the color of all <h1> headlines to yellow and make them bold.

13. **Center Align Text**
    Use CSS to center-align a paragraph <p> on your webpage.

14. **Use Classes and IDs**
    Create three paragraphs <p> about different types of plants.
    Use a class to style them with the same color and an ID to give one of
    them a unique font size.

15. **Add Inline Styles**
    Highlight a word in a paragraph using an inline style to change its
    background color to yellow.

16. **Change Text Color**
    Use CSS to change the text color of all paragraphs <p> to green.

17. **Adjust Font Size**
    Use CSS to set the font size of a paragraph <p> to 1.5em.

JavaScript Exercises

18.   **Display an Alert on Page Load**
         Write a script that shows an alert box with the message
         "Welcome to my webpage!" when the page loads.

19.   **Change Background Color with a Button**
         Add a button to your webpage that changes the background color to
         red when clicked.

20.   **Use the Prompt Method**
         Ask the user for their favorite color using prompt() and display their
         response on the webpage.

21.   **Create a Timer Function**
         Add a button that shows an alert saying "Time's up!" after 5 seconds
         when clicked.

22.   **Use a For Loop**
         Write a script that uses a for loop to display the numbers 1 to 5 on the
         webpage.

23.   **Use an ID to Style an Element**
         Use JavaScript to change the color and font size of a link <a> with a
         specific ID.

24.   **Mouseover Event**
         Add a button that changes its text color to blue when the mouse
         pointer hovers over it.

25.   **Use a While Loop**
         Write a script that uses a while loop to display the message "Learning is
         fun!" five times on the webpage.

Web Page Exercise 1: "Flower Showcase"
Goal: Build a webpage that introduces different types of flowers.
Features to include:
- Headings: <h1>Beautiful Flowers</h1>, <h3>My Top Picks</h3>, <h6>Explore Nature</h6>
- Paragraph about why you love flowers
- Image with <figcaption> for each flower (e.g., rose, tulip, lily)
- Table with flower names and size (reuse Exercise 6)
- list of flowers you want to plant
- Use a <div> to group content and style with CSS

Web Page Exercise 2: "Dream Cars Garage"
Goal: Introduce your three favorite car models.
Features to include:
- <h1>My Dream Garage</h1>
- Add 3 car images with captions
- Create a <ul> list of car brands and an <ol> list of top features
- Use JavaScript prompt to ask: "What's your favorite car brand?"
- Insert a styled <hr> to separate luxury from sports cars
- Add a button that changes the background color to black for "Garage Mode"

Website Exercise 1: "My Hobby Zone" (3 Pages)
Structure:
- index.html – Homepage with intro to your hobbies
- hobbies.html – List of hobbies with images, paragraphs, and styled sections
- gallery.html – A photo gallery using <img> and <figcaption>
Bonus: Use navigation links to connect pages!

Website Exercise 2: "Nature Explorer" (5 Pages)
Pages:
1. Home – Welcome + background color customization
2. Flowers – Use Exercise 6-style table
3. Animals – Add image, caption, and link to a fun fact video
4. Landscapes – Embed a video and center-aligned text
5. About – Your journey as a nature lover with a scrolling marquee and contact form

Tech Highlights:
- Use <nav> on each page
- Style with external CSS
- JavaScript prompt asking for user's favorite flower or animal

Web App Exercise 1: "Daily Quote Launcher"
What it does: Displays a motivational quote when you open it.
How to build:
1. Create a simple HTML page with <h1>Your Daily Quote</h1> and a quote inside <p>
2. Add CSS to center-align and style the background
3. JavaScript window.onload to show an alert with a random quote

Add to phone's start screen:
- **Android/Samsung (Chrome):** Open → Tap 3-dot menu → *Add to Home screen*
- **iPhone (Safari):** Tap share icon → *Add to Home Screen*

Web App Exercise 2: "My Color Picker"
What it does: Lets you choose a color and updates the background to match.
Steps:
1. HTML: Add <input type="color"> and a <button> labeled "Set Background"
2. CSS: Add smooth transitions for background color
3. JavaScript: On button click, change document.body.style.backgroundColor

To save as app:
- Same steps as above, and be sure to use a responsive layout so it looks good on any screen