**Lab Assignment 1: Basic HTML Structure**

* **Objective**: Create a simple HTML document with basic structure.
* **Tasks**:
  + Create a new HTML file.
  + Add <!DOCTYPE html> declaration.
  + Add <html>, <head>, and <body> tags.
  + Include a title and some basic content within <body> (e.g., headings, paragraphs).

**Lab Assignment 2: Text Formatting**

* **Objective**: Use various HTML tags to format text.
* **Tasks**:
  + Use headings (<h1> to <h6>).
  + Apply bold (<b>) and italic (<i>) styles.
  + Create paragraphs (<p>) and line breaks (<br>).
  + Add blockquotes (<blockquote>).

**Lab Assignment 3: Lists and Links**

* **Objective**: Create ordered, unordered lists, and hyperlinks.
* **Tasks**:
  + Create an ordered list (<ol>) and an unordered list (<ul>).
  + Nest lists within other lists.
  + Add hyperlinks (<a>) to external websites and internal pages.

**Lab Assignment 4: Images and Multimedia**

* **Objective**: Embed images, audio, and video.
* **Tasks**:
  + Embed an image using the <img> tag with alt text.
  + Embed an audio file using the <audio> tag with controls.
  + Embed a video file using the <video> tag with controls and multiple sources.

**Lab Assignment 5: Forms**

* **Objective**: Create a form with various input elements.
* **Tasks**:
  + Create a form with text fields, password fields, checkboxes, radio buttons, and submit/reset buttons.
  + Add a text area and a dropdown menu.
  + Use labels to associate text with form elements.

**Lab Assignment 6: Tables**

* **Objective**: Create and style a table.
* **Tasks**:
  + Create a table with <table>, <tr>, <th>, and <td> tags.
  + Add a table header and a caption.
  + Apply basic styles to the table using CSS.

**Lab Assignment 7: Semantic HTML**

* **Objective**: Use semantic HTML5 tags to structure content.
* **Tasks**:
  + Structure content using <header>, <nav>, <article>, <section>, <aside>, and <footer>.
  + Add meaningful content within each tag.

**Lab Assignment 8: Forms with HTML5 Enhancements**

* **Objective**: Create forms using new HTML5 input types and attributes.
* **Tasks**:
  + Use input types such as email, URL, date, and color.
  + Implement placeholders and required attributes.
  + Use form validation attributes like pattern and min/max.

**Lab Assignment 9: Canvas**

* **Objective**: Draw shapes and text using the <canvas> element.
* **Tasks**:
  + Create a canvas and set its dimensions.
  + Use JavaScript to draw shapes (e.g., rectangles, circles) and text on the canvas.
  + Apply colors and styles to the drawings.

**Lab Assignment 10: Local Storage**

* **Objective**: Use local storage to store and retrieve data.
* **Tasks**:
  + Create a form to collect user data.
  + Store the data in local storage.
  + Retrieve and display the stored data on the page.

**Lab Assignment 11: Web Workers**

* **Objective**: Implement web workers to run scripts in the background.
* **Tasks**:
  + Create a web worker script to perform a time-consuming task.
  + Communicate between the main script and the web worker.
  + Display results from the web worker on the page.

**Lab Assignment 12: Geolocation API**

* **Objective**: Use the Geolocation API to get and display the user's location.
* **Tasks**:
  + Create a button to request the user's location.
  + Display the latitude and longitude on the page.
  + Show the location on a map using an embedded map service (e.g., Google Maps).

**Lab Assignment 13: Responsive Design with Media Queries**

* **Objective**: Create a responsive web page using media queries.
* **Tasks**:
  + Design a web page with a flexible layout.
  + Use media queries to adjust the layout for different screen sizes.
  + Test the page on various devices and screen resolutions.

**Lab Assignment 14: SVG Graphics**

* **Objective**: Create and manipulate SVG graphics.
* **Tasks**:
  + Embed an SVG image in the HTML.
  + Draw shapes like rectangles, circles, and lines using SVG tags.
  + Style the SVG elements using CSS.

**Lab Assignment 15: Drag and Drop API**

* **Objective**: Implement drag and drop functionality.
* **Tasks**:
  + Create draggable elements.
  + Define drop zones.
  + Handle drag events to move elements between drop zones.