#### 1. Border

#### • Basic Borders:

Create a rectangular box with:

- o A 5px solid blue border.
- o Rounded corners using border-radius.

#### • Creative Borders:

Create a button with:

- o A double border on all sides.
- o A border that changes color on hover.

#### Border Styles:

Design three boxes with:

- o Dashed borders.
- Dotted borders.
- o A border style that applies different colors and thicknesses to each side.

## 2. Margin

### • Basic Margin:

Create a webpage with three boxes aligned vertically:

- o Add a 20px margin between the boxes.
- o Center the entire group using margin: auto.

## Negative Margin:

Design two overlapping boxes:

o Use negative margins to position one box partially over the other.

## • Responsive Margins:

Build a grid layout:

- o Add a 5% margin around the grid container.
- o Maintain consistent spacing between the grid items using margins.

# 3. Padding

#### • Basic Padding:

Create a text box:

 Add padding on all sides to create a 30px space between the text and the edges.

### Custom Padding:

Create a container with:

o Different padding values for each side (e.g., 10px top, 20px right, 30px bottom, 40px left).

### • Responsive Padding:

Create a container that uses:

 Percentage-based padding values to make the spacing responsive to the container's size.

#### 4. Width

#### • Fixed Width:

Create a div with:

o A width of 300px and ensure it doesn't expand.

## • Dynamic Width:

Create a layout where:

o The main content takes up 80% of the viewport width.

#### • Min and Max Width:

Create a responsive card with:

- o A min-width of 200px.
- o A max-width of 400px.
- o Ensure it scales dynamically within these constraints.

## 5. Height

### • Fixed Height:

Create a box with a height of 400px and:

o Add scrolling behavior if the content overflows.

### • Dynamic Height:

Design a container that:

o Occupies 50% of the viewport height (vh).

## • Min and Max Height:

Create a section with:

- o min-height set to 300px.
- o max-height set to 600px.
- Ensure the section remains scrollable if the content exceeds the maximum height.

# 6. Font-Family

#### • Basic Font-Family:

Create a webpage with a heading and a paragraph:

o Use a serif font for the heading and a sans-serif font for the paragraph.

#### • Google Fonts:

Import a Google Font (e.g., Lobster) and:

- o Apply it to the heading text.
- o Use a fallback font for the body text.

## • Custom Font Styling:

Create a text container and:

- o Use a decorative font for a heading (e.g., Cursive).
- o Apply a monospace font for any code snippets.

## 7. Min/Max Width and Height

#### • Basic Constraints:

Create a box with:

- o A min-width of 200px and a max-width of 600px.
- o Ensure the box resizes dynamically when the viewport changes.

## • Responsive Image Gallery:

Create a gallery with images:

- o Each image should have a min-width of 150px and a max-width of 300px.
- o Add spacing between the images using margins.

## • Dynamic Section:

Design a webpage section:

- o Set min-height to 400px and max-height to 800px.
- o Add a scrollable area if the content exceeds the maximum height.

# **Combined Component Assignments**

#### 1. Profile Card:

Create a responsive profile card with:

- o A fixed height and width.
- o Padding for the text inside.
- o A min-width and max-width to ensure the card is responsive.

## 2. Landing Page Layout:

Design a landing page with:

- o A hero section that takes up 100% of the viewport width and at least 50% of the height.
- o A content section with max-width to constrain its layout on wider screens.

#### 3. Interactive Button Design:

Create a button with:

- o Dynamic width using min-width and max-width.
- o A padding increase on hover.
- o Rounded corners with a visible border.

### 4. Product Cards Grid:

Design a grid layout for product cards:

- o Each card should have a min-height of 250px and a max-height of 500px.
- o Ensure equal margins between the cards.

## 5. Blog Layout:

Create a blog layout with:

- o A heading styled using a decorative font-family.
- o Content with min-width: 400px and max-width: 800px.
- o Margins and padding to create a balanced, readable design.