PART 1: TRANSITIONS

Assignment 1: Button Hover Effects

Create 3 buttons:

1. `.btn-scale` → On hover scale to 1.1
2. `.btn-color` → Change background smoothly
3. `.btn-slide` → Move 10px right on hover

Conditions:

- Use `transition`
- Duration: 0.3s
- Use SCSS nesting

Assignment 2: Card Hover Elevation

Create a card component that:

- Has box-shadow
- On hover:
  - Moves up (translateY)
  - Increases shadow
  - Slightly scales

Use:

- SCSS variables for transition speed
- Separate transition for transform and box-shadow

Assignment 3: Image Zoom Effect

Create an image container:

- On hover image should zoom (scale 1.2)
- Add overflow hidden
- Smooth transition

Bonus:
Add grayscale filter and remove it on hover.

Assignment 4: Navigation Underline Animation

Create navigation links.

On hover:

- Animate underline from left to right
- Use `::after`
- Use `transition`

Assignment 5 (Advanced Transition)

Create a sidebar that:

- Initially width: 60px
- On hover width expands to 200px
- All content fades in smoothly

Use:

- `transition`
- opacity animation

PART 2: ANIMATIONS (Keyframes)

Assignment 1: Fade In Section

Create a section that:

- Fades in on page load
- Moves from bottom to top
- Duration: 1s

Use `@keyframes`

Assignment 2: Loader Spinner

Create a circular loader:

- Use border technique
- Rotate continuously
- Animation infinite
- Linear timing

Assignment 3: Bouncing Ball

Create a bouncing ball:

- Use translateY
- 0%, 50%, 100% keyframes
- Infinite animation

Bonus:
Make it slower and faster using variable.

Assignment 4: Pulse Effect

Create a button with pulse animation:

- Expand shadow
- Reduce opacity
- Repeat infinitely

Assignment 5: Text Typing Effect (Intermediate)

Create a typing animation:

- Animate width from 0 to full
- Use steps() timing function
- Hide overflow
- Add blinking cursor animation

PART 3: SCSS + Animation (Using Variables & Mixins)

Assignment 1: Animation Mixin

Create a mixin:

```
@mixin animate($name, $duration, $ease, $repeat)
```

Use it to apply animation to 3 different elements.

Assignment 2: Dynamic Duration System

Create a variable map:

```
$durations: (
  slow: 2s,
  normal: 1s,
  fast: 0.5s
);
```

Use `map-get()` to apply different animation speeds.

Assignment 3: Multiple Keyframes Generator

Using `@each`, create:

- fadeIn
- slideIn
- zoomIn

Automatically generate animation classes:

```
.animate-fadeIn
.animate-slideIn
.animate-zoomIn
```

Assignment 4: Animated Card System

Build a reusable card system that:

- Has hover transition
- Has fadeIn animation on load
- Has pulse animation on featured card
- Uses SCSS variables for speed and colors

PART 4: Combined Practice Project (Mini Project)

Assignment 1: Animated Landing Page Hero

Include:

- Heading fade in
- Button scale hover
- Image floating animation
- Scroll down arrow bounce animation

Assignment 2: Animated Login Form

Include:

- Slide in form
- Input focus transition
- Submit button pulse
- Error message shake animation

Assignment 3: Dashboard Cards

Include:

- Cards fade in sequentially
- Hover lift effect
- Notification badge pulse
- Loading spinner animation

Assignment 4: Animated Portfolio Page

Include:

- Image hover zoom
- Text slide up on hover

- Navigation underline animation
- Section reveal animation