Exercise 1: CSS Selectors

Create an HTML document with multiple paragraphs. Write **CSS** rules to apply different styles to:
- All paragraphs (that is all the ‹p› elements in the page must have font size 16px and font blue)
- Only the first paragraph (font must be bold)
- Paragraphs with a specific class (font colour: yellow)

```
‹!DOCTYPE html›
‹html›
‹head›
‹style›
  /* Select all paragraphs */
  p {
    font-size: 16px;
    color: blue;
  }

  /* Select only the first paragraph */
  p:first-child {
    font-weight: bold;
  }

  /* Select paragraphs with class 'special' */
  p.special {
    background-color: yellow;
  }
</style›
</head›
‹body›
  ‹p›This is the first paragraph.‹/p›
  ‹p class="special"›This is a special paragraph.‹/p›
  ‹p›Another regular paragraph.‹/p›
  ‹p class="special"›Another special paragraph.‹/p›
</body›
</html›
```

Exercise 2: Background Styles

Description: Create an **HTML** document and apply different background styles using **CSS** for the page and specific elements.
Given the following **HTML** body:
```
‹body›
  ‹div class="box"›This is a box with a coloured background.‹/div›
</body›
```
set the background of the whole page to #f0f0f0, the box background colour to #ffcc00 and the padding of the box to 20pt

```
‹!DOCTYPE html›
‹html›
```

```
<head>
  <title>CSS Lab Exercises</title>
  <style>
    /* Exercise 2: Background Styles */
    body {
      background-color: #f0f0f0; /* Set the background of the whole page to #f0f0f0 */
    }

    .box {
      background-color: #ffcc00; /* Set the box background color to #ffcc00 */
      padding: 20px; /* Set the padding of the box to 20pt */
    }
  </style>
</head>
<body>

<h1>CSS Lab Exercises</h1>

<h2>Exercise 2: Background Styles</h2>
<div class="box">This is a box with a colored background.</div>

</body>
</html>
```

Exercise 3: Box Model

Description: Create an HTML document and experiment with the box model properties: margins, padding, and borders.

Given the following HTML body:

```
<body>
  <div class="box">Box with Margins, Padding, and Border</div>
</body>
</html>
```

set the size of the box to 200px (width) and 100px (height), the margin to 20px, the padding to 10px and the border to 2px and colour black (using the #xxxxxx notation)

```
<!DOCTYPE html>
<html>
<head>
<style>
  .box {
    width: 200px;
    height: 100px;
    margin: 20px;
    padding: 10px;
    border: 2px solid #000;
  }
</style>
</head>
```

```
<body>
  <div class="box">Box with Margins, Padding, and Border</div>
</body>
</html>
```

Exercise 5: Font and Google Icons

Description: Create an HTML document and set fonts for the page using Google Fonts.
Use the body of the previous exercise to set the font to 'Open Sans', sans-serif (remember to include the link to Google fonts https://fonts.googleapis.com/css?family=Open+Sans che è a sua volta uno stylesheet (si fa quello nel documento HTML)

```
<!DOCTYPE html>
<html>
<head>
<link href="https://fonts.googleapis.com/css?family=Open+Sans" rel="stylesheet">
<style>
  body {
    font-family: 'Open Sans', sans-serif;
  }

</style>
</head>
<body>
  <p>This text uses the Open Sans font.</p>
</body>
</html>
```

Exercise 6: Floating Elements

Description: Create an HTML document with multiple elements and float them to see how they interact.
Given the following body:
```
<body>
  <div>Left Column</div>
  <div>Right Column</div>
</body>
```
make the two elements float to the left and to the right using "float"

```
<!DOCTYPE html>
<html>
<head>
<style>
  .float-left {
    float: left;
    width: 50%;
  }

  .float-right {
    float: right;
    width: 50%;
```

```
    }
</style>
</head>
<body>
  <div class="float-left">Left Column</div>
  <div class="float-right">Right Column</div>
</body>
</html>
```

Exercise 7: Viewport

Description: Create an **HTML** document and set the viewport to the width of the device and initial scale to 1.

```
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<style>
  /* Your CSS styles here */
</style>
</head>
<body>
  <!-- Your HTML content here -->
</body>
</html>
```

Exercise 8: Margins and Paddings:
Create a centred box of text with a coloured background, and add margins and paddings to it.

```
<!DOCTYPE html>
<html>
<head>
  <title>CSS Lab Exercises</title>
  <style>
    /* Exercise 8: Margins and Paddings */
    .centered-box {
      width: 200px;
      height: 200px;
      background-color: #ffcc00;
      margin: 0 auto; /* Center the box horizontally */
      padding: 20px;
    }
  </style>
</head>
<body>
<h1>CSS Lab Exercises</h1>
<h2>Exercise 8: Margins and Paddings</h2>
<div class="centred-box">
  This is a centred box with margins and paddings.
```

```
</div>
</body>
</html>
```

Exercise 9: Heights and Widths of Elements:

Create a responsive image with a width of 100%.

```
<!DOCTYPE html>
<html>
<head>
  <title>CSS Lab Exercises</title>
  <style>
    /* Exercise 8: Width of Elements */
    .responsive-image {
      width: 100%;
      height: auto; /* Maintain aspect ratio */
    }
  </style>
</head>
<body>
  <h1>CSS Lab Exercises</h1>
  <h2>Exercise 8: Width of Elements</h2>
  <img src="your-image-url.jpg" alt="Responsive Image" class="responsive-image">
</body>
</html>
```

Exercise 10: Opacity of Elements:

Create an image with 50% opacity

```
<!DOCTYPE html>
<html>
<head>
  <title>CSS Lab Exercises</title>
  <style>
    /* Exercise 9: Opacity of Elements */
    .transparent-image {
      opacity: 0.5; /* 50% opacity */
    }
  </style>
</head>
<body>
  <h1>CSS Lab Exercises</h1>
  <h2>Exercise 9: Opacity of Elements</h2>
  <img src="your-image-url.jpg" alt="Transparent Image" class="transparent-image">
</body>
</html>
```