

The default value is linear.

Here we set ease-in.

```
.box {
  width: 100px;
  height: 100px;
  background-color: lightgreen;
  padding: 10px;
  transition: transform 0.5s ease-in;
  -webkit-transition: transform 0.5s ease-in;
  -moz-transition: transform 0.5s ease-in;
  -ms-transition: transform 0.5s ease-in;
  -o-transition: transform 0.5s ease-in;
}
.box:hover {
  transform: rotate(45deg);
  -webkit-transform: rotate(45deg);
  -moz-transform: rotate(45deg);
  -ms-transform: rotate(45deg);
  -o-transform: rotate(45deg);
}
```

The fourth parameter is the delay function:

```
transition: transform 0.5s cubic-bezier(.52,.91,1,.48) 1s;
-webkit-transition: transform 0.5s cubic-bezier(.52,.91,1,.48) 1s;
-moz-transition: transform 0.5s cubic-bezier(.52,.91,1,.48) 1s;
-ms-transition: transform 0.5s cubic-bezier(.52,.91,1,.48) 1s;
-o-transition: transform 0.5s cubic-bezier(.52,.91,1,.48) 1s;
```

```
@keyframes jafar-loka {
  0% {
    transform: scale(1);
    -webkit-transform: scale(1);
    -moz-transform: scale(1);
    -ms-transform: scale(1);
    -o-transform: scale(1);
  }

  25% {
    transform: scale(1.5);
    -webkit-transform: scale(1.5);
    -moz-transform: scale(1.5);
    -ms-transform: scale(1.5);
    -o-transform: scale(1.5);
  }

  50% {
    transform: rotate(45deg);
    -webkit-transform: rotate(45deg);
    -moz-transform: rotate(45deg);
    -ms-transform: rotate(45deg);
    -o-transform: rotate(45deg);

    background-color: lightgrey;
  }

  75% {
    transform: scale(1.2);
    -webkit-transform: scale(1.2);
    -moz-transform: scale(1.2);
    -ms-transform: scale(1.2);
    -o-transform: scale(1.2);
  }

  100% {
    transform: rotate(0) scale(1);
    -webkit-transform: rotate(0) scale(1);
    -moz-transform: rotate(0) scale(1);
    -ms-transform: rotate(0) scale(1);
    -o-transform: rotate(0) scale(1);
  }
}
```

```
.box {
  width: 100px;
  height: 100px;
  padding: 10px;
  background-color: lightgreen;
  animation-name: jafar-loka;
  animation-duration: 4s;
  animation-delay: 0.5s;
  animation-iteration-count: 4; /* This specify the number of times to run the
animation*/
}
```

Note: The animation-iteration-count can have infinite-value to run the animation in loop.

Note: Also, we can define the timing function:

```
animation-timing-function: ease-out;
```

The alternate: The animation cycle iterations that are odd counts are played in the normal direction, and the animation cycle iterations that are even counts are played in a reverse direction.

Note: Here also we have many values, like: reverse, normal(the default), ...etc.

```
animation-direction: alternate;
```

Also, we have animation-fill-mode.

```
/* animation: name duration timing-function delay iteration-count direction fill-
mode; */
animation-fill-mode: backwards;
```

For name convention; if we set prefix for class-names, we don't need to use nesting.

BEST PRACTICES

- Follow a naming convention
- Create logical sections in your stylesheet
- Avoid over-specific selectors
- Avoid !important

BEST PRACTICES

- Sort CSS properties
- Take advantage of style inheritance
- Extract repetitive patterns
- Avoid repetitive values (Keep it DRY)

This will create two-divs:

```
.one+.two
```

```
<div class="one"></div>  
<div class="two"></div>
```

OBJECT-ORIENTED CSS

- Separate container and content
- Separate structure and skin

BEM: for Naming convention in CSS styles:

Separate the name of classes between two `_`: `__` (separate the block from element)

Ex: `card__header`.

Separate block from modifier; we use two `-`: `--`.

Ex: `card--popular`.

Block Element Modifier

Follow a naming convention for naming IDs and classes. The most common naming conventions are **PascalCase**, **camelCase** and **kabob-case**.

For a small project, you can write all of your CSS rules in one stylesheet. Use CSS comments to create logical sections in your stylesheet. For a more complex project, you need to separate your stylesheet into multiple files and combine them together using build tools like Webpack, Rollup or Parcel.

When using a custom font, the user may experience a *flash of unstyled text (FOUT)*. Some browsers display text using a fallback font while downloading the custom font and swap it once the custom font is available. This may cause a layout shift depending on how the content is structured. Some browsers hide the text initially while downloading the custom font. This causes a *flash of invisible text (FOIT)*. Using the `font-display` property we can tell the browser how to handle this situation.

It's best to use the rem unit for vertical margins. For headings, the top margin should be noticeably greater than the bottom margin so the heading gets separated from the text before and gets connected to the text after.

Using the ***line-height** property* we can specify the height of lines. It's best to set this property to a unitless value *around 1.5*. This value will be multiplied by *the font size* of the current element so we don't need to remember to *change the line height* if we modify the *font size*.

The three properties used for horizontal spacing are: `letter-spacing`, `word-spacing`, and `width`. It's often better to apply a negative letter spacing to headings so they look more compact.

The ideal line length is about 60-70 characters. We can achieve that by applying a width of 50ch. The ch unit represents the width of the 0. 50 zeroes roughly represents 60-70 characters because some characters (like i and l) are narrower than 0.

To ensure that the container is in the middle, set the horizontal margin to **auto**. This way any extra space will be equally distributed to the left and right margins.

Give the image a width of 100% to make it responsive.

Margin collapsing happens when the top and bottom margins of elements are combined into a single margin. The size of the margin is equal to the largest of the two margins.

Using the position property we can precisely position an element. The default value of this property is static. If we change the value of this property, the element is considered *positioned*.

By setting the position to relative, we can position an element relative to its normal position. By setting it to absolute, we can position it relative to its positioned parent. That means, the parent (or ancestor) should be a positioned element. By setting the position to fixed, we can position the element relative to the viewport.

We use the *img element* to display content images. Content images can represent meaningful content or be used for decorative purposes. If used *for decoration*, we should set the `alt` attribute to *an empty string*; otherwise, screen readers will read out the name of the file which may be distracting to the user.

Note that the input fields and the button have the same width. One way to achieve this is by applying the same width (eg 200px) to both these elements. But what if we need shorter or longer input fields on a different page? A more flexible approach is to give these elements a width of 100% so they always stretch and fill their container. The actual width can then be applied on the container.

```
.menu{
  background: #2a2138;
  color: #cfc6dc;
}
.menu a {
  /* I've used inherit here so if we change the color of the text in the
  .menu rule (above), all anchors in the menu will automatically inherit
  in the new color. Alternatively, I'd have to specify the same color in
  two places. */
  color: inherit;
  text-decoration: none;
}
```

```

.form-control, .btn {
  border-radius: 5px;
  /* The default box-sizing for input fields is content-box. So, any padding we
  apply to an input
  field, increases its width. To ensure that input fields and buttons have the
  same width, we need
  to set box-sizing to border-box. */
  box-sizing: border-box;

  padding: 1.5rem;

  /* It's a common technique to set the width of input fields and buttons to
  100% so they fill up
  their container. We can then control their size through their container (in
  this case form-signin) */
  width: 100%;
}

```

In CSS, ***vmin*** stands for viewport minimum. The ***vmin function*** is used to set the size of an element as a percentage of the ***minimum*** value ***between the viewport width or height***. For example, if the ***viewport is 1000px wide*** and ***800px high***, if we set the width of an element to ***30vmin***, it will ***be 30% of the height***.
