

## 3.2. Text in CSS

The formatting of your text can have a significant effect on how readable your pages are.

### Text Properties

The properties that allow you to control the appearance of text can be split into two groups:

- Those that directly affect the font and its appearance (including the typeface, whether it is regular, bold or italic, and the size of the text)
- Those that would have the same effect on text no matter what font you were using (including the color of text and the spacing between words and letters)

When choosing a typeface, it is important to understand that a browser will usually only display it if it's installed on that user's computer.

### Typeface Terminology

#### **SERIF**

Serif fonts have extra details on the ends of the main strokes of the letters. These details are known as serifs.

In print, serif fonts were traditionally used for long passages of text because they were considered easier to read.

**Examples:** Georgia, Times New Roman

im

#### **SANS-SERIF**

Sans-serif fonts have straight ends to letters, and therefore have a much cleaner design.

Screens have a lower resolution than print. So, if the text is small, sans-serif fonts can be clearer to read.

**Examples:** Arial, Verdana, Helvetica

im

#### **MONOSPACE**

Every letter in a monospace (or fixed-width) font is the same width. (Non-monospace fonts have different widths.)

Monospace fonts are commonly used for code because they align nicely, making the text easier to follow.

**Example:** Courier

im

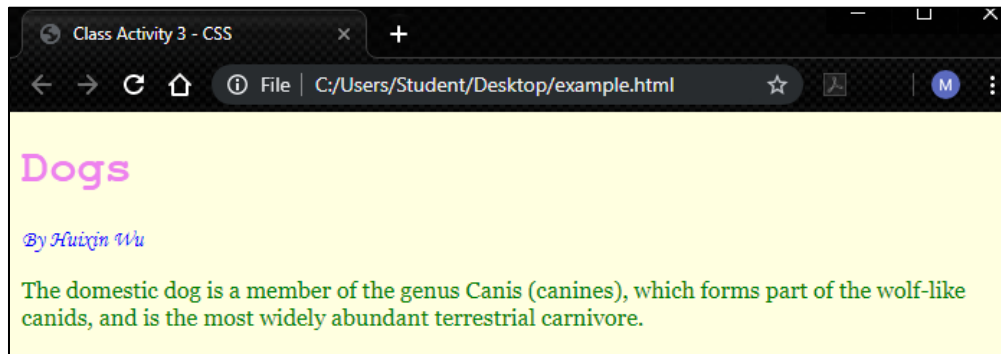
## CURSIVE

Cursive fonts either have joining strokes or other cursive characteristics, such as handwriting styles.

**Example:** *Monotype Corsiva*

*im*

**Exercise)** Using the previous html code, create a new paragraph and name it as **author** using **class** property.



```
<!DOCTYPE html>
<html lang="en" dir="ltr">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Class Activity 3 - CSS</title>
    <link href="css/styles.css" type="text/css" rel="stylesheet" />
  </head>
  <body> <h1>Dogs</h1>
  <p class="author">By <i>Huixin Wu</i> </p>
  <p class="intro"> The domestic dog is a member of the genus Canis (canines),
  which forms part of the wolf-like canids, and is the most widely abundant
  terrestrial carnivore.</p>
</body>
</html>
```

html file

Add new paragraph with class name "author"

```
body {
background-color: lightyellow;
}
h1 {
color:violet;font-family: courier;
}
.intro{
color: green; font-family: georgia;
}
.author{
color: blue;font-family: "monotype corsiva";
}
```

style.css

## Text Characteristics

### font-weight

The font weight not only adds emphasis but can also affect the amount of white space and contrast on a page.

#### Examples:

Light      Medium      **Bold**      Black

### font-style

Italic fonts have a cursive aspect to some of the lettering. Oblique font styles take the normal style and put it on an angle

#### Examples:

Normal      *Italic*      *Oblique*

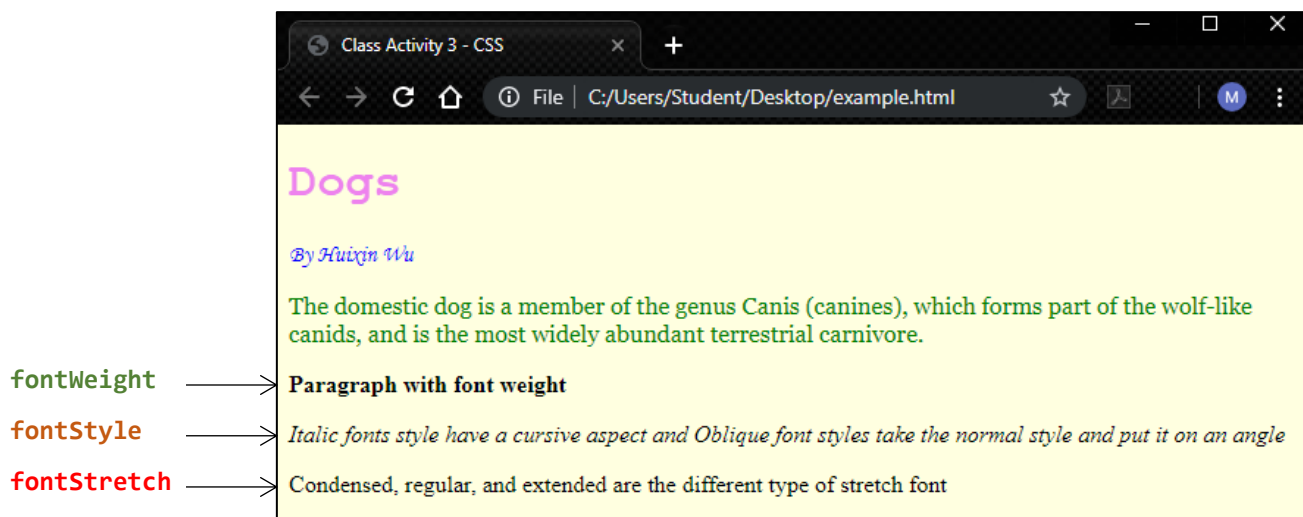
### font-stretch

In condensed (or narrow) versions of the font, letters are thinner and closer together. In expanded versions they are thicker and further apart.

#### Examples:

**Condensed**      Regular      EXTENDED

**Exercise)** Using the previous code, add three more paragraphs with class name **fontWeight**, **fontStyle**, and **fontStretch**



```

<!DOCTYPE html>
<html lang="en" dir="ltr">
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Class Activity 3 - CSS</title>
  <link href="css/styles.css" type="text/css" rel="stylesheet" />
</head>
<body> <h1>Dogs</h1>
  <p class="author">By <i>Huixin Wu</i></p>
  <p class="intro"> The domestic dog is a member of the genus Canis (canines), which
forms part of the wolf-like canids, and is the most widely abundant terrestrial
carnivore.</p>
  > <p class="fontWeight">Paragraph with font weight</p>
  > <p class="fontStyle">Italic fonts style have a cursive aspect and Oblique font
styles take the normal style and put it on an angle</p>
  > <p class="fontStretch">Condensed, regular, and extended are the different type of
stretch font</p>
</body>
</html>

```

Add the following paragraphs

```

.fontWeight{
  font-weight: bold;
}
.fontStyle{
  font-style: oblique;
}
.fontStretch{
  font-stretch: condensed;
}

```

style.css

### Units of Text Type Size

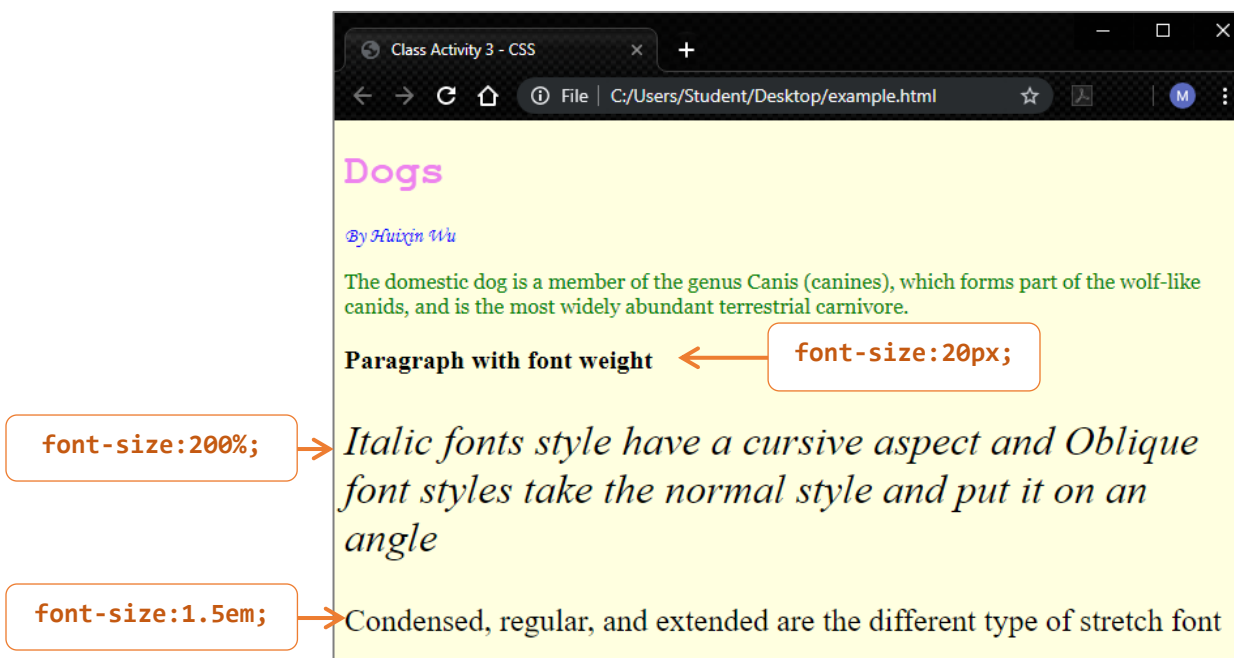
The default size of text in a browser is 16 pixels.

Text can be written as pixels, percentages, and ems.

Pixels	Percentages	ems
Setting font size in pixels is the best way to ensure that the type appears at the size you intended (because percentages and ems are more likely to vary if a user has changed the default size of text in their browser)	The default size of text in a web browser is 16 pixels. Using percentages of this amount, you can create a scale where the default text size is 12 pixels, and headings are sized in relation to this.	Ems allow you to change the size of text relative to the size of the text in the parent element. Since the default size of text in web browsers is 16 pixels, you can use similar rules to those shown for percentages.

Pixels	Percentages	Ems (Ephemeral Unit Scalable)
body → 16px	body → 100%	body → 100%
p → 16px	p → 100%	p → 1em
h1 → 32px	h1 → 200%	h1 → 2em
h2 → 24px	h2 → 150%	h2 → 1.5em
h3 → 18px	h3 → 112.5%	h3 → 1.125em

**Example)** Using the previous CSS file, use different values of **font-size** to class fontWeight, fontStyle, and fontStretch



```

font-weight: bold;
font-size: 20px;
}
font-style: oblique;
font-size: 200%;
}
font-stretch: condensed;
font-size: 1.5em;
}

```

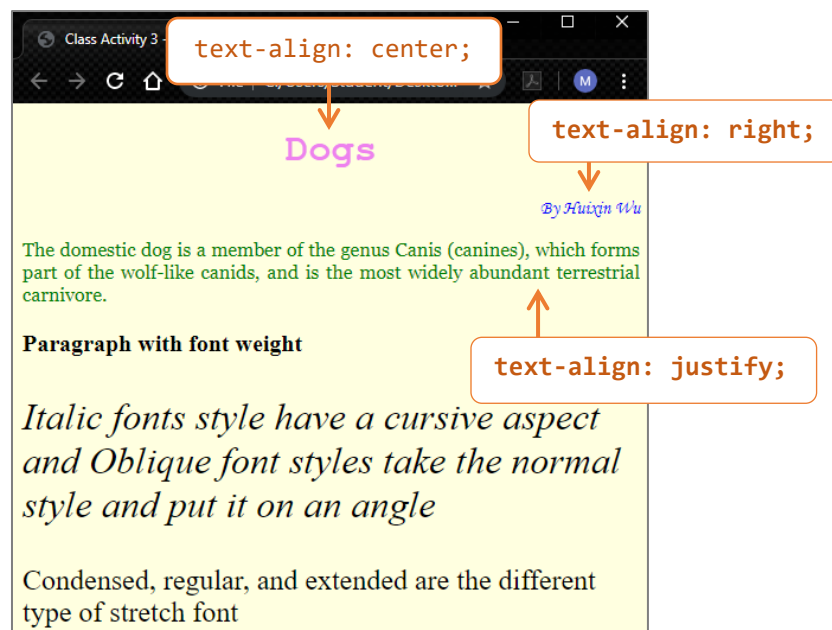
*style.css*

## Text Alignment (horizontal)

The **text-align** property allows you to control the alignment of text. The property can take one of four values:

- **left**: This indicates that the text should be left-aligned.
- **right**: This indicates that the text should be right-aligned.
- **center**: This allows you to center text.
- **justify**: This indicates that every line in a paragraph, except the last line, should be set to take up the full width of the containing box.

**Example)** Using the previous css code, add different **text-align** properties to **h1**, **.intro**, and **.author**



```
h1 {  
  color:violet;  
  font-family: courier;  
  text-align: center;  
}  
.intro{  
  color: green;  
  font-family: georgia;  
  text-align: justify;  
}  
.author{  
  font-family: "monotype corsiva";  
  color: blue;  
  text-align: right;  
}
```

*style.css*

## Text-Shadow

The **text-shadow** property is used to create a drop shadow, which is a dark version of the word just behind it and slightly offset. It can also be used to create an embossed effect by adding a shadow that is slightly lighter than the text.

**text-shadow** can use three lengths and a color for the drop shadow.

The first length indicates how far to the left or right the shadow should fall.

The second value indicates the distance to the top or bottom that the shadow should fall.

The third value is optional and specifies the amount of blur that should be applied to the drop shadow.

The fourth value is the color of the drop shadow.

```
text-shadow: 5px 10px 20px black;
```

**Example)** Create different **text-shadow** effect.

**Text Shadow** *html*

```
<h1 class="title1">Text Shadow</h1>
```

*style.css*

```
.title1{  
  text-shadow: 10px 0px 0px black;  
}
```

**Text Shadow** *html*

```
<h1 class="title4">Text Shadow</h1>
```

*style.css*

```
.title4{  
  text-shadow: 5px 10px 5px black;  
}
```

**Text Shadow** *html*

```
<h1 class="title2">Text Shadow</h1>
```

*style.css*

```
.title2{  
  text-shadow: 0px 10px 0px black;  
}
```

**Text Shadow** *html*

```
<h1 class="title5">Text Shadow</h1>
```

*style.css*

```
.title5{  
  text-shadow: 5px 10px 30px black;  
}
```

**Text Shadow** *html*

```
<h1 class="title3">Text Shadow</h1>
```

*style.css*

```
.title3{  
  text-shadow: 5px 10px 0px black;  
}
```

## Text Border, Margin & Padding

Every box has three available properties that can be adjusted to control its appearance:

### border

Every box has a border (even if it is not visible or is specified to be 0 pixels wide). The border separates the edge of one box from another.

### Border Style

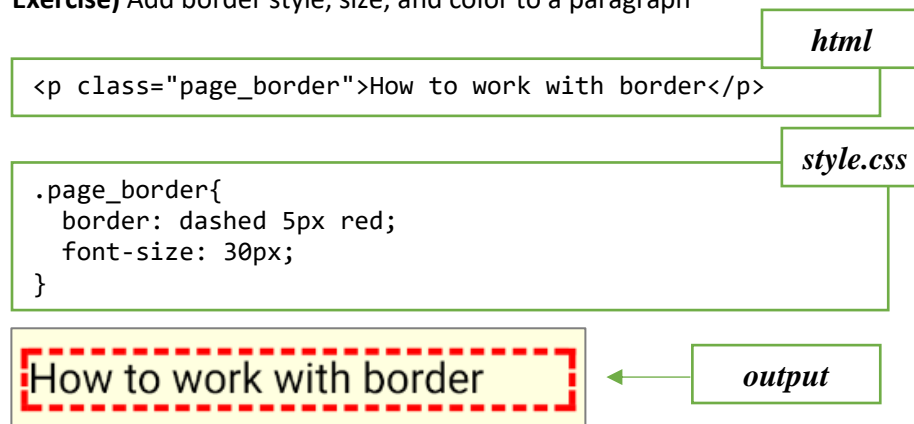
You can control the style of a border using the border-style property. This property can take the following values:

- **solid** a single solid line.
- **dotted** a series of square dots (if your border is 2px wide, then the dots are 2px squared with a 2px gap between each dot)
- **dashed** a series of short lines
- **double** two solid lines (the value of the border-width property creates the sum of the two lines)
- **groove** appears to be carved into the page
- **ridge** appears to stick out from the page
- **inset** appears embedded into the page
- **outset** looks like it is coming out of the screen
- **hidden / none** no border is shown

**border** values can be written in one line: border style, border size, and border color:

**border: dashed 5px red;**

**Exercise)** Add border style, size, and color to a paragraph





## margin

Margins sit outside the edge of the border. You can set the width of a margin to create a gap between the borders of two adjacent boxes.

The margin property controls the gap between boxes. Its value is commonly given in pixels, although you may also use percentages or ems.

### Specify margin

You can specify values for each side of a box using: margin-top, margin-right, margin-bottom, margin-left.

**Example)** Add right margin to a paragraph

```
<p class="m1">There are dozens of different potato varieties.</p>
```

*html*

```
.m1{margin-right:100px; border: solid 10px green;}
```

*css*

There are dozens of different potato varieties.

### Margin with one value

A margin with one value means that the value is added to all sides (top, right, bottom, left) of the element.

**Example)** Add the same margin, 50px, to all sides of a paragraph

```
<p class="m2">There are dozens of different potato varieties. </p>
```

*html*

```
.m2{margin: 50px; border: solid 10px green;}
```

*css*

There are dozens of different potato varieties.

### Margin with two values

A shorthand to add margin is by given two values. The first value is for the top and bottom margin, and the second value is for the left and right margin.

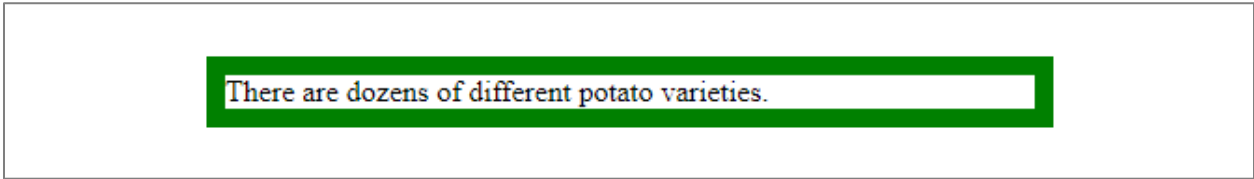
**Example)** Add 50px to the top and bottom of a paragraph and 100px to the right and left of the a paragraph

```
<p class="m3">There are dozens of different potato varieties. </p>
```

*html*

```
.m3{margin: 50px 100px; border: solid 10px green;}
```

*css*



There are dozens of different potato varieties.

### Margin with four values

You can also use another shorthand with four values, where the values are in clockwise order: top, right, bottom, left

```
margin: 10px 20px 30px 5px;
```

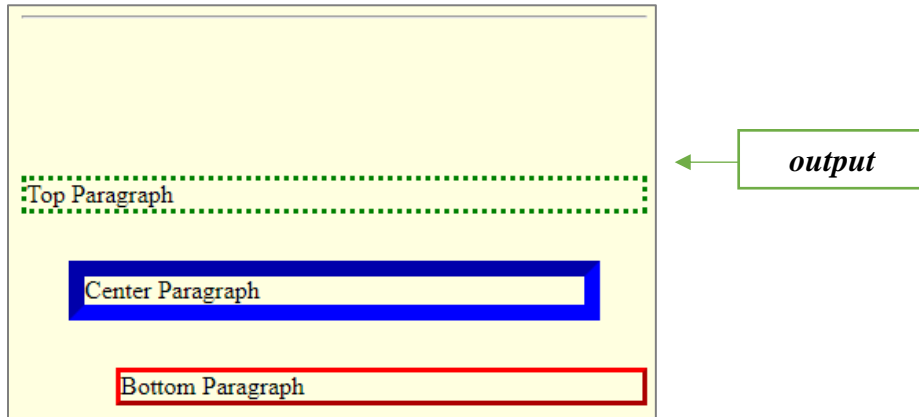
**Example)** Create three paragraphs and apply different margin and border values to each paragraph

```
<p class="margin1">Top Paragraph </p>  
<p class="margin2">Center Paragraph</p>  
<p class="margin3">Bottom Paragraph</p>
```

*html*

*style.css*

```
.margin1{  
  margin-top: 100px;  
  border: dotted green 3px;  
}  
.margin2{  
  margin: 30px;  
  border:inset blue 10px;  
}  
.margin3{  
  margin-left: 60px;  
  border: outset red;  
}
```



## padding

Padding is the space between the border of a box and any content contained within it. Adding padding can increase the readability of its contents.

The padding property allows you to specify how much space should appear between the content of an element and its border.

The value of this property is most often specified in pixels (although it is also possible to use percentages or ems). If a percentage is used, the padding is a percentage of the browser window (or of the containing box if it is inside another box).

### Specify padding

You can specify different values for each side of an element by using `padding-top`; `padding-right`; `padding-bottom`; `padding-left`.

**Example)** add 30px of left padding to a paragraph

```
<p class="padding1">There are dozens of different potato varieties.  
They are usually described as early, second and main crop.</p>
```

*html*

```
.padding1{padding-left: 30px; border: 10px inset orange; }
```

*css*

There are dozens of different potato varieties. They are usually described as early, second and main crop.

### Padding with one value

A padding with one value means that the value is added to all sides (top, right, bottom, left) of the element.

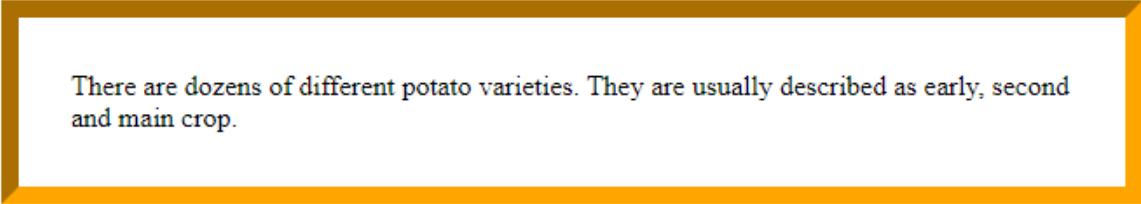
**Example)** apply 50px of padding to all sides of an element

```
<p class="padding2">There are dozens of different potato varieties.  
They are usually described as early, second and main crop.</p>
```

*html*

```
.padding2{padding: 30px; border: 10px inset orange; }
```

*css*



There are dozens of different potato varieties. They are usually described as early, second and main crop.

### Padding with two values

A shorthand to add padding is by given two values. The first value is for the top and bottom padding, and the second value is for the left and right padding.

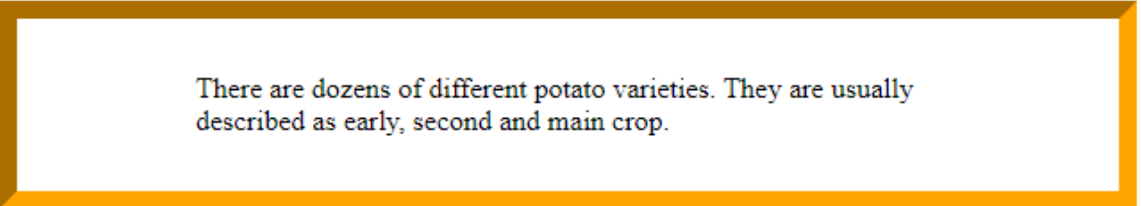
**Example)** apply 30px of padding to the top and bottom, and 100px to the left and right of an element

```
<p class="padding3">There are dozens of different potato varieties.  
They are usually described as early, second and main crop.</p>
```

*html*

```
.padding3{padding: 30px 100px; border: 10px inset orange; }
```

*css*



There are dozens of different potato varieties. They are usually described as early, second and main crop.

### Padding with four values

Another shorthand to add padding is by given four values, where the values are in clockwise order: top, right, bottom, left

**Example)** apply 10px to top padding, 5px to right padding, 30px to bottom padding, and 100px to left padding

```
<p class="padding4">There are dozens of different potato varieties.  
They are usually described as early, second and main crop.</p>
```

*html*

```
.padding4{padding: 10px 5px 30px 100px ; border: 10px inset orange;}
```

*css*

There are dozens of different potato varieties. They are usually described as early, second and main crop.

**Example)** Create three paragraphs and apply three different padding to each of them.

```
<p class="one">Without Padding</p>  
<p class="two">padding to 20px</p>  
<p class="three">padding top by 50px</p>
```

*html file*

```
.one{ border: ridge green;}  
  
.two{  
  padding:20px;  
  border: solid gray 2px;  
}  
  
.three{  
  padding-top: 50px;  
  border: dotted black;  
}
```

*style.css*

Without Padding

padding to 20px

padding top by 50px

*output*