

* 2D Transform

2D transform - origin: Allow you to change position on transformed elements.

* Transform → allow you to

- Move
- rotate
- Scale
- Skew

elements.

* methods

- transform()
- translate()
- rotate()
- scaleX()
- scaleY()
- scale()
- skewX()
- skewY()
- skew()
- matrix()

Sno	Name	details	eg
1	Translate	Moves an element from its current position according to the parameter given for x and y axis.	<pre> <!DOCTYPE html> <html> <head> <style> div { height: 100px; width: 250px; background-color: #d4b88d; border: 1px solid black; transform: translate(150px, 100px); } </style> </head> <body> <div> Smiley Smiley Smiley </div> </body> </html> </pre>
2	Rotate	Rotate an element clockwise or counterclockwise according to given degree.	<pre> <!DOCTYPE html> <html> <head> <style> div.rot1 { height: 100px; width: 250px; background-color: #d4b88d; border: 1px solid black; } div.rot2 { height: 100px; width: 250px; background-color: #d4b88d; border: 1px solid black; transform: rotate(90deg); } </style> </head> </pre>


```

<body>
  <div class="rot1">
    Smokey </div>
  <div class="rot2">
    This rotation
    of 90deg </div>
</body>
</html>

```

3

Scale()

This increase or decreases the size of an element.

(According to parameters given for height and width)

Scale(x) → Increases/decreases width of an element

Scale(y) → Increases/decreases height of an element.

```

<!DOCTYPE html>
<html>
  <head>
    <style>
      div.rot1 {
        height: 100px;
        width: 250px;
        background-color: #grey;
        border: 1px solid black;
        transform: scale(1,1);
      }
    </style>
  </head>
  <body>
    <div class="rot1"> This is Scale </div>
  </body>
</html>

```

4

Skew()

Skews an element along x & y axis by given angles.

Skew(x) Skews element along x axis by given angle

Skew(y) ——— along y axis by given angle.

```

<!DOCTYPE html>
<html>
  <head>
    <style>
      div {
        margin: auto;
        height: 100px;
        width: 250px;
        background-color: #grey;
        border: 1px solid black;
        transform: skew(15deg, 15deg);
      }
    </style>
  </head>
  <body>
    <div> Skew </div>
  </body>
</html>

```

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5) matrix()

• Combines all the 2D Transform methods into one.

• matrix (scaleX, skewY, skewX, scaleY, translateX, translateY)

Eg:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      div {
        margin: auto;
        height: 100px;
        width: 200px;
        background-color: #d9d9d9;
        border: 1px solid black;
        transform: matrix(1, -0.3, 0, 1, 0, 0);
      }
    </style>
  </head>
  <body>
    <div> Skew </div>
  </body>
</html>
```