transform() METHOD IN HTML5 CANVAS

- The **transform**() is the method of HTML CANVAS.
- The **transform**() method is used to transform the current diagram by using the transformation matrix like an identity matrix.
- The **transform**() method is used to scale, rotate, move, and skew the diagram.

Syntax for transform() Method in HTML5 Canvas:

```
context.transform(a,b,c,d,e,f);
```

Parameter Values for transform() method in HTML5 Canvas::

Parameter	Description
a	Horizontal scaling
b	Horizontal skewing
c	Vertical skewing
d	Vertical scaling
e	Horizontal moving
f	Vertical moving

Sample Coding for transform() Method in HTML5 Canvas:

```
<!DOCTYPE html>
<html>
    <head>
        <title>wikitechy-transform()in canvas</title>
    </head>
    <body>
        <h1>wikitechy-transform() in canvas</h1>
        <canvas id="wikitechyCanvas" width="300" height="150"
        style="border:1px solid #d3d3d3;">
        </canvas>
        <script>
            var canvas = document.getElementById("wikitechyCanvas");
            var context = canvas.getContext("2d");

            context.fillStyle = "purple";
            context.fillRect(0, 0, 250, 200);

            context.transform(1, 0.5, -0.5, 1, 30, 10);
            context.fillStyle = "pink";
            context.fillRect(0, 0, 250, 200);

            context.transform(1, 0.5, -0.5, 1, 30, 10);
            context.fillStyle = "green";
            context.fillRect(0, 0, 250, 100);
        </script>
    </body>
</html>
```


Code Explanation for transform() Method in HTML5 Canvas:

```
<!DOCTYPE html>
<html>
    <head>
        <title>wikitechy-transform()in canvas</title>
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            context.fillStyle = "pink";
            context.fillRect(0, 0, 250, 200);

            context.transform(1, 0.5, -0.5, 1, 30, 10);
            context.fillStyle = "green";
            context.fillRect(0, 0, 250, 100);
        </script>
    </body>
</html>
```
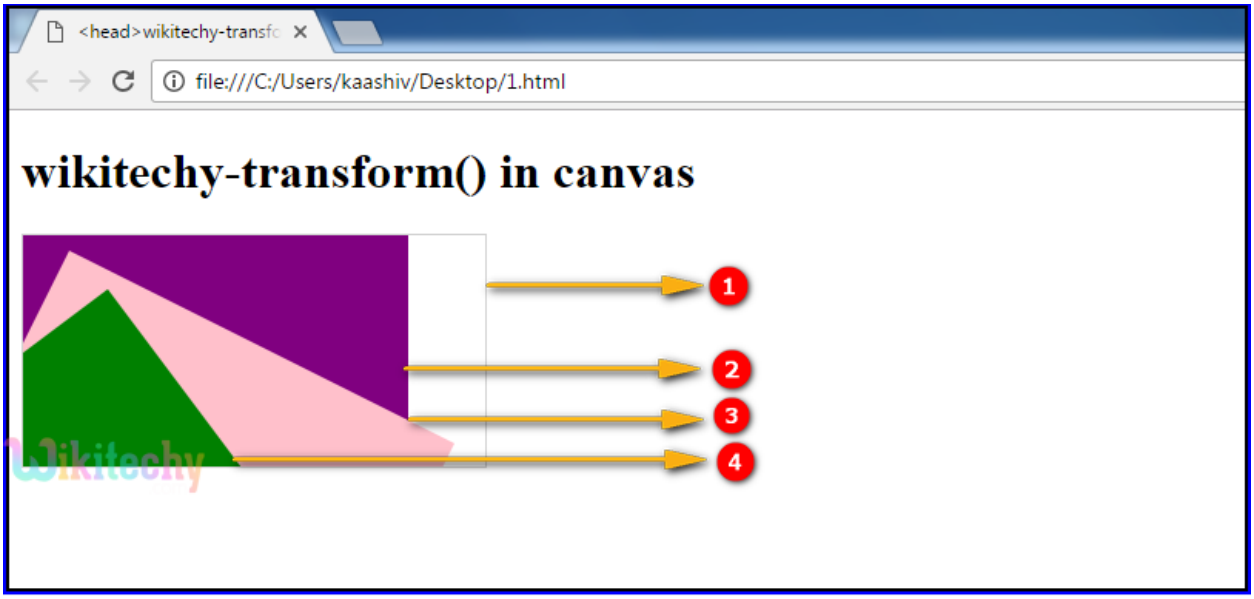


1. "**wikitechyCanvas**" is used to declare the id value of the canvas tag.
2. The **getElementById();** method is used to get the element with the specific id **("wikitechyCanvas").**
3. **canvas.getContext("2d")** method returns an object that provides methods and properties for drawing on the canvas.
4. The **context.fillStyle()** method is used to fillStyle of a diagram (purple color rectangular box).
5. The **context.fillRect()** method is used to draws a "filled" rectangle **(0,0,250,200)** in (x0,y0,x1,y1).
6. The **context.transform()** method is used to "transform" a diagram **(1, 0.5, -0.5, 1, 30, 10);** in (a,b,c,d,e,f).
7. The **context.fillstyle()** method is used to fillstyle of a diagram (pink color rectangular box).
8. The **context.fillRect()** method is used to draws a "filled" rectangle **(0,0,250,200)** (x0,y0,x1,y1).
9. The **context.transform()** method is used to "transform" a diagram **(1, 0.5, -0.5, 1, 30, 10);** (a,b,c,d,e,f).
10. The **context.fillstyle()** method is used to fillstyle of a diagram (green color rectangular box).
11. The **context.fillRect()** method is used to draws a "filled" rectangle**(0, 0, 250, 100);** in (x0,y0,x1,y1).

Output for transform() Method in HTML5 Canvas:



1. <canvas>tag is used to draw a rectangle with gray border.
2. The rectangle is drawn with this parameter(0,0,250,200) and filled with purple color
3. The rectangle is drawn with this parameter (0,0,250,250)and filled with pink color
    - context.transform(1, 0.5, -0.5, 1, 30, 10);
4. The rectangle is drawn with this parameter (0,0,250,100)and filled with green color
    - context.transform(1, 0.5, -0.5, 1, 30, 10);

Browser Support for transform() Method in HTML5 Canvas:

Browser	Support
Chrome	Yes
Internet explorer / Edge	9.0
Firefox	Yes
Safari	Yes
Opera	Yes

Tips and Notes :

- The setTransform() method does not behave relatively to other transformations.

