What is SVG?

- SVG stands for Scalable Vector Graphics
- SVG is used to define graphics for the Web
- SVG is a W3C(world wide web consortium: संघ) recommendation

. The HTML <svg> Element

- The HTML <svg> element is a container for SVG graphics.
- SVG has several methods for drawing paths, boxes, circles,

```
<body>
    <svg width="500" height="500" style="border:2px solid black" >
        <rect width='80' height="80" x="200" y="200 fill="skyblue" stroke="blue"</pre>
stroke-width=10 rx="10"
    </svg>
    <svg width="500" height="500" style="border:2px solid black" >
        <circle cx="250" cy="250" r="100" fill="skyblue" stroke="blue" stroke-</pre>
width=10
    </svg>
    <svg width="500" height="500" style="border:2px solid black" >
        <polygon points="242,33 298,172 477,197 333,264 388,411 240,326 96,408</pre>
148,263 5,176 187,172
        style= "fill:rgb(7, 118, 7);
                stroke:rgb(1, 34, 17);
                stroke-width:5;
    </svg>
```

Canvas:

The HTML <canvas> element is used to draw graphics on a web page.

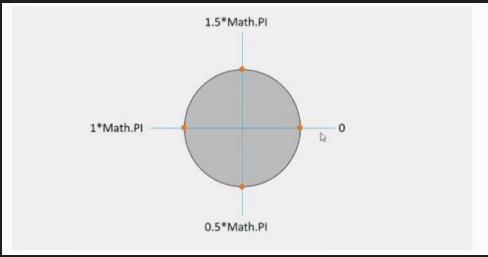
What is canvas?

- The HTML <canvas> element is used to draw graphics via JavaScript
- The <canvas> element is only a container for graphics. You must use JavaScript to actually draw the graphics.
- Canvas has several methods for drawing paths, boxes, circles, text, and adding images.

```
<body>
    <canvas id="thecanvas" width="500" height="500" style="border:3px</pre>
solid red">
    </canvas>
    <canvas id="thecanvas2" width="500" height="500" style="border:3px</pre>
solid rgb(6, 2, 42)">
    </canvas>
    <canvas id="thecanvas3" width="500" height="500" style="border:3px</pre>
solid rgb(6, 2, 42)">
    </canvas>
    <script>
        var canvas=document.getElementById('thecanvas');
        var cntext=canvas.getContext("2d");
        cntext.fillStyle='red'
        cntext.fillRect(150,200, 170,100)
        cntext.strokeStyle='blue'
        cntext.strokeRect(150,200, 170,100)
        var c = document.getElementById("thecanvas2");
        var ctx = c.getContext("2d");
            ctx.moveTo(0, 0);
            ctx.lineTo(200, 100);
            ctx.stroke();
       var a=document.getElementById("thecanvas3");
       var b=a.getContext("2d");
```

```
b.strokeStyle="red"
b.moveTo(150,250); //where from the line start
b.strokeStyle="red"
b.lineTo(250,50); //ending point
b.lineTo(350,250);
b.lineTo(150,250);
b.stroke();

var circle = document.getElementById("thecanvas3");
var cntx = circle.getContext("2d");
cntx.strokeStyle="red"
cntx.beginPath();
cntx.arc(250,250,100,0,2*Math.PI );
cntx.stroke();
```



```
var text = document.getElementById("thecanvas2");
var cntx = text.getContext("2d");
ctnx.font="20px arial";
ctnx.fillStyle='red'
ctnx.fillText("Aman",200,2000);

<p
```