

## OSTL – 6

- Write an HTML 5 program to show the usage of all the tags, attributes and elements used in HTML 5.

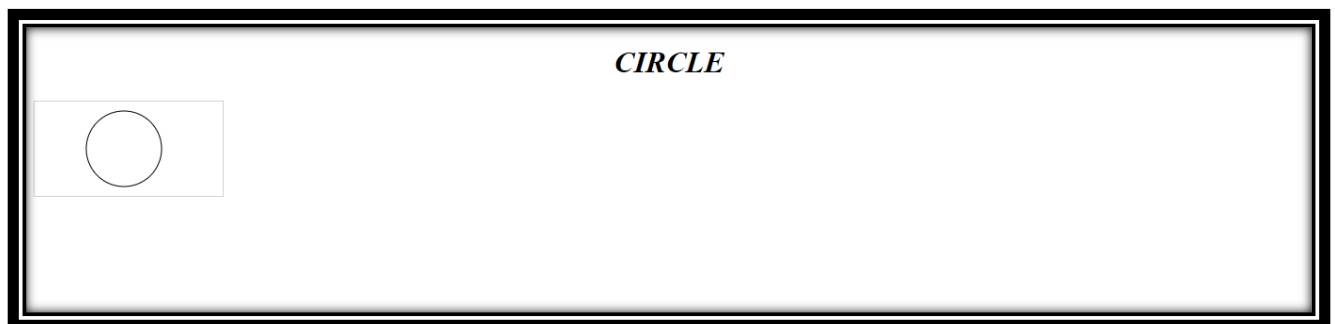
---

html code :

```
<!DOCTYPE html>
<html>
  <head>
    <title>Example problem</title>
  </head>

  <body>
    <h1 style="text-align: center;"><b><i>CIRCLE</i></b></h1>
    <canvas id="myCanvas" width="200" height="100" style="border: 1px solid #d3d3d3;">
      Your browser does not support the HTML5 canvas tag.</canvas>
    <script>
      var c = document.getElementById("myCanvas");
      var ctx = c.getContext("2d");
      ctx.beginPath();
      ctx.arc(95,50,40,0,2*Math.PI);
      ctx.stroke();
    </script>
  </body>
</html>
```

Output :



## 9. Specifying headings of the content and inserting paragraphs of text content :

- Headings – h1 to h6
- Paragraphs and line breaks
- Text formatting
- Preformatted text
- Marking deleted and inserted text
- Setting text direction of an element
- Usage of div and span tags

html code :

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>1st Question</title>
```

```
</head>
```

```
<body>
```

```
<h1>First heading</h1>
```

```
<h2>Second heading</h2>
```

```
<h3>Third heading</h3>
```

```
<h4>Fourth heading</h4>
```

```
<h5>Fifth heading</h5>
```

```
<h6>Sixth heading</h6><br>
```

```
<p>I created a new paragraph using the p tag.<br>And broke it into several  
lines using the br tag.</p>
```

```
<p><b>b tag makes the text appear bold</b></p>
```

```
<p><i>i tag creates the italics text</i></p>
```

```
<p>Using sup tag we can create superscript text just like this  
Hello<sup>World</sup></p>
```

```
<p>Using sub tag we can create subscript text just like this  
Hey<sub>Everyone</sub></p><br>
```

```
<pre>
```

```
    This is
```

```
    how
```

```
    wE
```

```
    cReAtE
```

```
preformatted text. The text will be displayed exactly as written in the HTML  
source code</pre>
```

```
<h4>del and ins tags</h4>
```

```
<p>I love <del>strawberry</del> <ins>chocolate</ins> milkshake. </p>
```

```
<h4>Setting text direction of an element</h4>
<p style="text-align: left;">Date : 20-12-2021</p>
<p style="text-align: right;">Place : Manipal</p>
<p style="text-align: center;">Greetigs everybody</p>
<div>This is a div <span>(This is a span element(inline element))</span>
element(block element)</div>
</body>
</html>
```

Ouput :

# First heading

## Second heading

### Third heading

#### Fourth heading

##### Fifth heading

###### Sixth heading

I created a new paragraph using the p tag.  
And broke it into several lines using the br tag.

**b tag makes the text appear bold**

*i tag creates the italics text*

Using sup tag we can create superscript text just like this Hello<sup>World</sup>

Using sub tag we can create subscript text just like this Hey<sub>Everyone</sub>

```
    This is
    how
    wE
    cReAtE
preformatted text.The text will be displayed exactly as written in the HTML source code
```

**b tag makes the text appear bold**

*i tag creates the italics text*

Using sup tag we can create superscript text just like this Hello<sup>World</sup>

Using sub tag we can create subscript text just like this Hey<sub>Everyone</sub>

```

    This is
    how
    we
    create
preformatted text. The text will be displayed exactly as written in the HTML source code
```

**del and ins tags**

I love ~~strawberry~~ chocolate milkshake.

**Setting text direction of an element**

Date : 20-12-2021

Place : Manipal

Greetigs everybody

This is a div (This is a span element(inline element)) element(block element)

## 10. Creating links to other HTML documents or Web resources :

- Create hyperlinks
- Using image as a Link
- Open link in a new browser window
- Navigate inside page

html code :

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <title>2nd Question</title>
```

```
</head>
```

```
<body>
```

```
    <h3>To learn HTML</h3>
```

```
    <a href="https://www.w3schools.com/tags/tag_img.asp">Click here</a><br>
```

```
    <h3>img element as link</h3>
```

```
    <a href="https://www.google.com"></a><br>
```

```
    <h3>Link for a new tab</h3>
```

```
    <a target="_blank" href="https://google.com">Click here to open new
window</a><br>
```

```
    <h3>Navigate inside page</h3>
```

[What is pollution](#1)  
[Effects of pollution](#2)  
[Types of pollution](#3)  
[How to reduce pollution](#4)

<p id="1">

Pollution is a term which even kids are aware of these days. It has become so common that almost everyone acknowledges the fact that pollution is rising continuously. The term 'pollution' means the manifestation of any unsolicited foreign substance in something. When we talk about pollution on earth, we refer to the contamination that is happening of the natural resources by various pollutants. All this is mainly caused by human activities which harm the environment in ways more than one. Therefore, an urgent need has arisen to tackle this issue straightaway. That is to say, pollution is damaging our earth severely and we need to realize its effects and prevent this damage. In this essay on pollution, we will see what are the effects of pollution and how to reduce it.

</p>

<p id="2">

Pollution affects the quality of life more than one can imagine. It works in mysterious ways, sometimes which cannot be seen by the naked eye. However, it is very much present in the environment. For instance, you might not be able to see the natural gases present in the air, but they are still there. Similarly, the pollutants which are messing up the air and increasing the levels of carbon dioxide is very dangerous for humans. Increased level of carbon dioxide will lead to global warming. Further, the water is polluted in the name of industrial development, religious practices and more will cause a shortage of drinking water. Without water, human life is not possible. Moreover, the way waste is dumped on the land eventually ends up in the soil and turns toxic. If land pollution keeps on happening at this rate, we won't have fertile soil to grow our crops on. Therefore, serious measures must be taken to reduce pollution to the core.

</p>

<p id="3">

Types of Pollution : Air Pollution, Water Pollution, Soil Pollution.

</p>

<p id="4">

After learning the harmful effects of pollution, one must get on the task of preventing or reducing pollution as soon as possible. To reduce air pollution, people should take public transport or carpool to reduce vehicular smoke. While it may be hard, avoiding firecrackers at festivals and celebrations can also cut down on air and noise pollution. Above all, we must adopt the habit of recycling. All the used plastic ends up in the oceans and land, which pollutes them.

</p>

</body>  
</html>

Output :

## To learn HTML

[Click here](#)

## img element as link



## Link for a new tab

[Click here to open new window](#)

### Navigate inside page

[What is pollution](#)  
[Effects of pollution](#)  
[Types of pollution](#)  
[How to reduce pollution](#)

Pollution is a term which even kids are aware of these days. It has become so common that almost everyone acknowledges the fact that pollution is rising continuously. The term 'pollution' means the manifestation of any unsolicited foreign substance in something. When we talk about pollution on earth, we refer to the contamination that is happening of the natural resources by various pollutants. All this is mainly caused by human activities which harm the environment in ways more than one. Therefore, an urgent need has arisen to tackle this issue straightaway. That is to say, pollution is damaging our earth severely and we need to realize its effects and prevent this damage. In this essay on pollution, we will see what are the effects of pollution and how to reduce it.

Pollution affects the quality of life more than one can imagine. It works in mysterious ways, sometimes which cannot be seen by the naked eye. However, it is very much present in the environment. For instance, you might not be able to see the natural gases present in the air, but they are still there. Similarly, the pollutants which are messing up the air and increasing the levels of carbon dioxide is very dangerous for humans. Increased level of carbon dioxide will lead to global warming. Further, the water is polluted in the name of industrial development, religious practices and more will cause a shortage of drinking water. Without water, human life is not possible. Moreover, the way waste is dumped on the land eventually ends up in the soil and turns toxic. If land pollution keeps on happening at this rate, we won't have fertile soil to grow our crops on. Therefore, serious measures must be taken to reduce pollution to the core.

Types of Pollution : Air Pollution, Water Pollution, Soil Pollution.

After learning the harmful effects of pollution, one must get on the task of preventing or reducing pollution as soon as possible. To reduce air pollution, people should take public transport or carpool to reduce vehicular smoke. While it may be hard, avoiding firecrackers at festivals and celebrations can also cut down on air and noise pollution. Above all, we must adopt the habit of recycling. All the used plastic ends up in the oceans and land, which pollutes them.

11. Inserting images into the HTML document :
- Setting width and height of the images
  - Aligning images
  - Make a hyperlink of an image
  - Creating an image – map ( An image with clickable regions)

html code :

```
<!DOCTYPE html>
<html>
<head>
<title>3rd question</title>
</head>
<body>
  <h3>Inserting images</h3>
  
  <br>
  <h3>Setting height and width</h3>
  
  <br>
  <h3>Aligning images</h3>
  <br><br><br>

  <h3>Hyperlink of an image</h3>
  <a href="https://google.com"></a>
  <br>
  
  <map name="workmap">
    <area shape="rect" coords="0,0,50,50" alt="sky" href="https://google.com">
    <area shape="circle" coords="100,100, 50" alt="elephant"
href="https://www.w3schools.com">
  </map>
</body>
</html>
```

Output :

## Inserting images



## Setting height and width



## Aligning images

### Hyperlink of an image







Image-map



<https://www.w3schools.com>

12. Creating a simple table :
- Setting the dimension of a table
  - Specify the table caption
  - Tables with borders
  - Using cell padding, cell spacing, row span, column span attributes

html code :

```
<!DOCTYPE html>
<html>
<head>
<title>4th question</title>
</head>
<body>
<table>
<caption><b>first table</b></caption>
<tr>
<th>first</th>
```

```

<th>second</th>
<th>third</th>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</table>
<br><br>
<table border="2px" cellspacing="10px">
<caption><b>second table</b></caption>
<tr>
<th>first</th>
<th>second</th>
<th>third</th>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
</table>
<br><br>
<table border="2px" cellpadding="15px" >
<caption><b>third table</b></caption>
<tr>
<th>first</th>
<th>second</th>
<th>third</th>
</tr>
<tr>
<td>cat</td>
<td>rat</td>
<td>mat</td>
</tr>
<tr>
<td>bat</td>
<td>sat</td>
<td>hat</td>
</tr>
</table>

```

```
<br>
<table border="2px">
<caption><b>fourth table</b></caption>
<tr>
<th>first</th>
<th>second</th>
<th>third</th>
</tr>
<tr>
<td>content 1</td>
<td rowspan="2">content 2</td>
<td>content 3</td>
</tr>
<tr>
<td>content 4</td>
<td>content 5</td>
</tr>
<tr>
<td colspan="3">Colspan</td>
</tr>
</table>
</body>
</html>
```

Output :

**first table**

**first second third**

1 2 3

4 5 6

**second table**

first	second	third
A	B	C
D	E	F

**third table**

first	second	third
cat	rat	mat
bat	sat	hat

**fourth table**

first	second	third
content 1	content 2	content 3
content 4		content 5
Colspan		

13. Making your own lists :
- Unordered, Ordered and definition list

html code :

```
<!DOCTYPE html>
<html>
  <head>
    <title>5th question</title>
  </head>

  <body>
    <h3>My Tastes in beverages :</h3>
    <h4>Ordered list :</h4>
    <ol>
      <li>Milkshake</li>
      <li>Lemonade</li>
      <li>Milk</li>
    </ol>

    <h4>Unordered list :</h4>
    <ul style="list-style-type:square">
      <li>Milkshake</li>
      <li>Lemonade</li>
      <li>Milk</li>
    </ul>

    <h4>Definition list :</h4>
    <dl>
      <dt>Milkshake :</dt>
      <dd>This is my all time favourite.</dd>
      <dt>Lemonade :</dt>
      <dd>I like this more in summer.</dd>
      <dt>Milk :</dt>
      <dd>I drink this everyday.</dd>
    </dl>
  </body>
</html>
```

Output:

**My Tastes in beverages :**  
  
**Ordered list :**  
  

1. Milkshake
2. Lemonade
3. Milk

  
**Unordered list :**  
  

- Milkshake
- Lemonade
- Milk

  
**Definition list :**  
  
Milkshake :  
    This is my all time favourite.  
Lemonade :  
    I like this more in summer.  
Milk :  
    I drink this everyday.

14. Creating a simple form :
- Using Text input field
  - Creating password input field
  - Checkboxes and radio buttons
  - Drop down list
  - Select box with preselected value
  - Text area
  - Creating buttons ( Show the usage of submit and reset buttons )
  - Grouping similar form fields

html code :

```
<!DOCTYPE html>
<html>
<head>
<title>6th question</title>
</head>
<body>
<h2>Survey Form</h2>
<form>
```

```

<fieldset><legend>Text</legend>
Enter name :<br>
<input type="text"><br>
Enter password :<br>
<input type="password">
</fieldset>
<br>
<fieldset><legend>CheckBoxes and Radio Buttons</legend>
<input type="checkbox" id="firstcheckbox" name="firstcheckbox" value="one">
<label for="firstcheckbox"> 1st Checkbox</label><br>
<input type="checkbox" id="secondcheckbox" name="secondcheckbox"
value="two">
<label for="secondcheckbox"> 2nd Checkbox</label><br>
<input type="checkbox" id="thirdcheckbox" name="thirdcheckbox" value="three">
<label for="thirdcheckbox"> 3rd Checkbox</label>
<br>
<input type="radio" id="male" name="gender" value="male">
<label for="male">1st Radio Button</label><br>
<input type="radio" id="female" name="gender" value="female">
<label for="female">2nd Radio Button</label><br>
<input type="radio" id="other" name="gender" value="other">
<label for="other">3rd Radio Button</label>
</fieldset>
<br>
<fieldset>
<legend>Dropdown list :</legend>

<label for="stones">Dropdown</label>
<select name="stones" id="stones">
<option value="select">Select</option>
<option value="pearl">Pearl</option>
<option value="ruby">Ruby</option>
<option value="sapphire">Sapphire</option>
</select> <br><br>
<label for="stones">Dropdown</label>
<select name="stones" id="stones">
<option value="select">Select</option>
<option value="pearl">Pearl</option>
<option value="ruby">Ruby</option>
<option value="sapphire">Sapphire</option>
</select>
</fieldset>

<fieldset><legend>Submit</legend>
<label for="textarea">Text Area</label><br>
<textarea name="textarea"></textarea><br><br>
<input type="submit" name="submit" value="Submit">
<input type="reset" name="reset" value="Reset"></fieldset>
</form>
</body>
</html>

```

Output:

Survey Form

Text

Enter name :  
Shashank

Enter password :  
\*\*\*\*\*

CheckBoxes and Radio Buttons

☒ 1st Checkbox  
☐ 2nd Checkbox  
☒ 3rd Checkbox  
☐ 1st Radio Button  
☒ 2nd Radio Button  
☐ 3rd Radio Button

Dropdown list :

Dropdown Ruby

Dropdown Select

Submit Pearl  
Text Area Ruby  
Sapphire

Thanks for your response.

Submit Reset

## 16. HTML5 Canvas

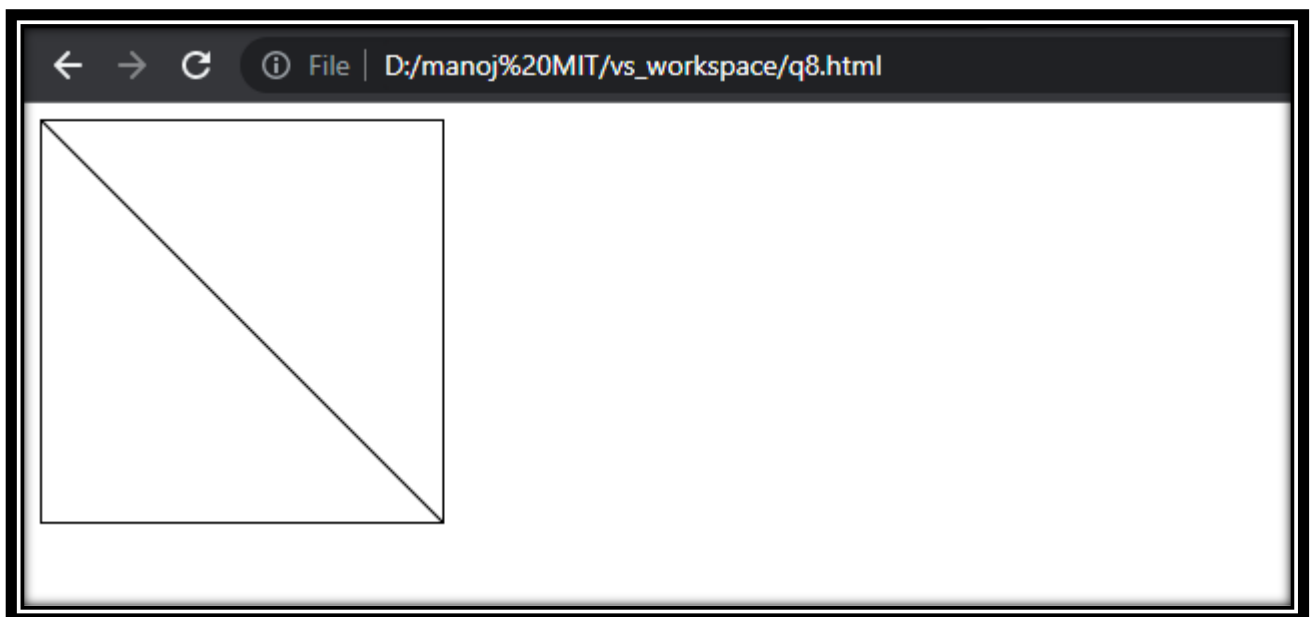
- Embedding canvas into an HTML document
- Drawing a line, circle, rectangle, arc onto the canvas
- Filling the colour into shapes on canvas
- Filling linear and radial gradient inside canvas shapes
- Setting the stroke colour and width on canvas.



html code :

```
<!DOCTYPE html>
<html>
<head>
<title>8th question</title>
</head>
<body>
<canvas id="myCanvas" width="200" height="200" style="border:1px solid
#000;"></canvas>
<script>
var c = document.getElementById("myCanvas");
var ctx = c.getContext("2d");
ctx.moveTo(0, 0);
ctx.lineTo(200, 200);
ctx.stroke();
</script>
</body>
</html>
```

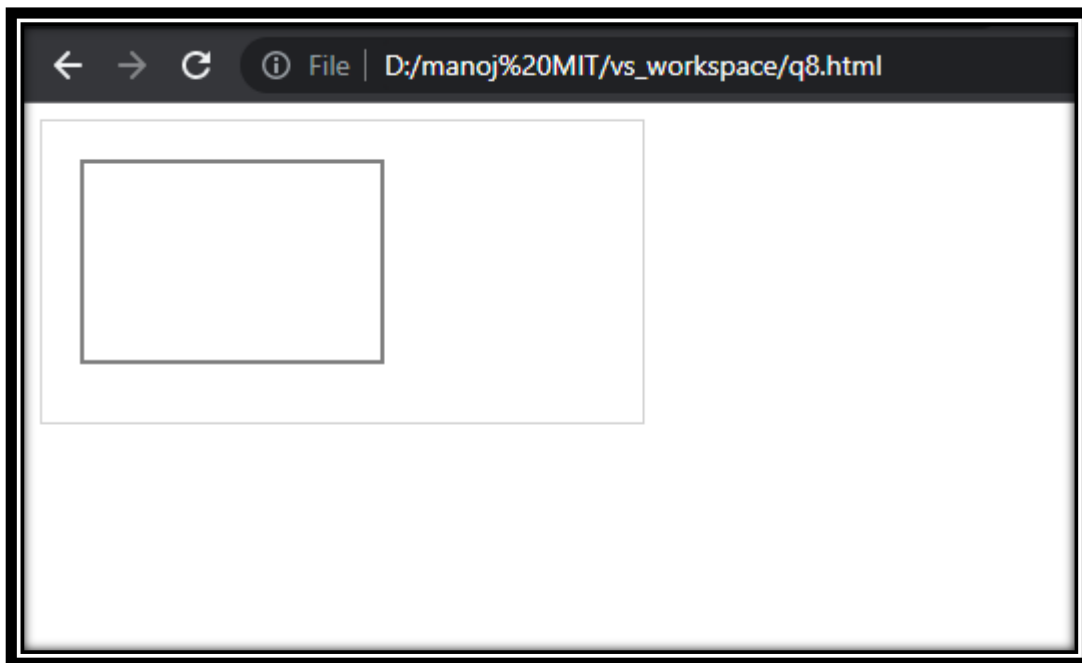
Output :



html code :

```
<!DOCTYPE html>
<html>
<head>
<title>8th question</title>
</head>
<body>
<canvas id="myCanvas" width="300" height="150" style="border:1px solid #d3d3d3;"></canvas>
<script>
var c = document.getElementById("myCanvas");
var ctx = c.getContext("2d");
ctx.beginPath();
ctx.rect(20, 20, 150, 100);
ctx.stroke();</script>
</body>
</html>
```

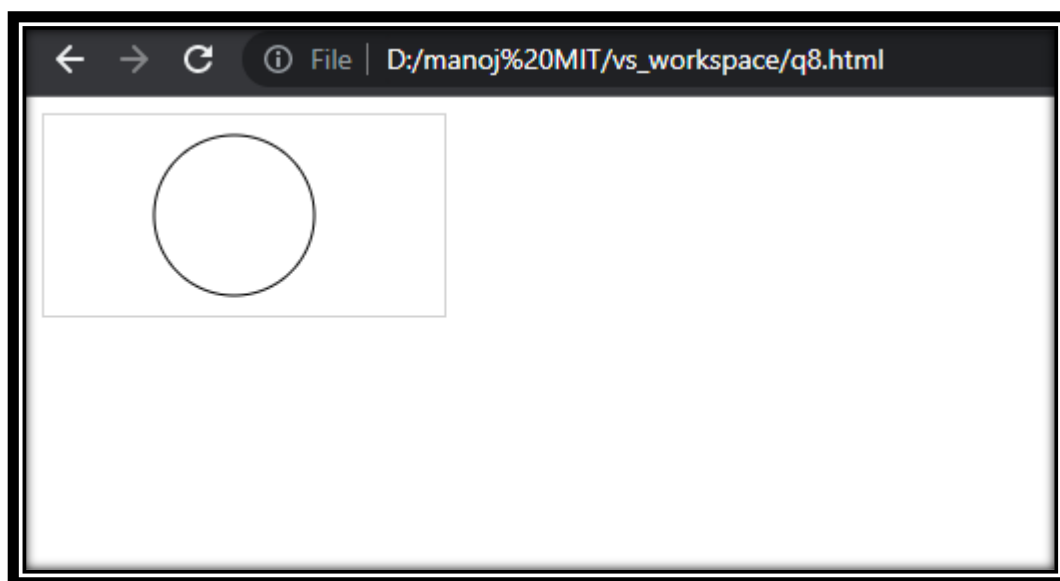
Output :



html code :

```
<!DOCTYPE html>
<html>
<head>
<title>8th question</title>
</head>
<body>
<canvas id="myCanvas" width="200" height="100" style="border:1px solid #d3d3d3;"></canvas>
<script>
var c = document.getElementById("myCanvas");
var ctx = c.getContext("2d");
ctx.beginPath();
ctx.arc(95,50,40,0,2*Math.PI);
ctx.stroke();
</script>
</body>
</html>
```

Output :



html code :

```
<!DOCTYPE html>
<html>
<head>
<title>8th question</title>
</head>
<body>
<canvas id="myCanvas" width="300" height="150" style="border:1px solid #d3d3d3;"></canvas>
<script>
var c = document.getElementById("myCanvas");
var ctx = c.getContext("2d");
ctx.beginPath();
ctx.arc(100, 75, 50, 0, 0.5 * Math.PI);
ctx.stroke();
</script>
</body>
</html>
```

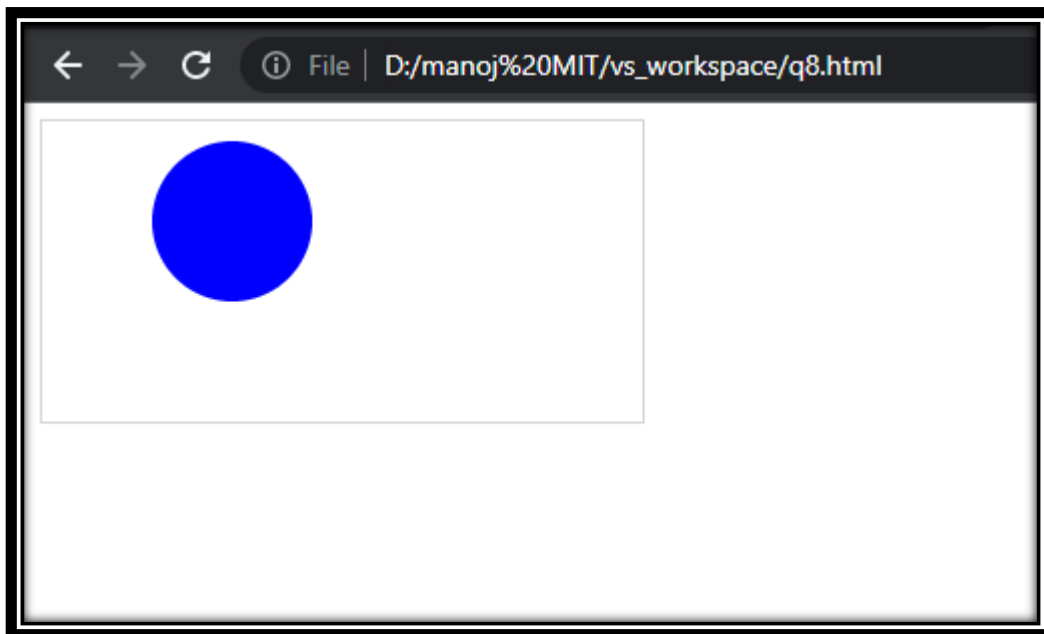
Output :



html code :

```
<!DOCTYPE html>
<html>
<head>
<title>8th question</title>
</head>
<body>
<canvas id="myCanvas" width="300" height="150" style="border:1px solid #d3d3d3;"></canvas>
<script>
var cir2 = document.getElementById("myCanvas");
var circir2 = cir2.getContext("2d");
circir2.beginPath();
circir2.arc(95, 50, 40, 0, 2 * Math.PI);
circir2.fillStyle = "blue";
circir2.fill();
</script>
</body>
</html>
```

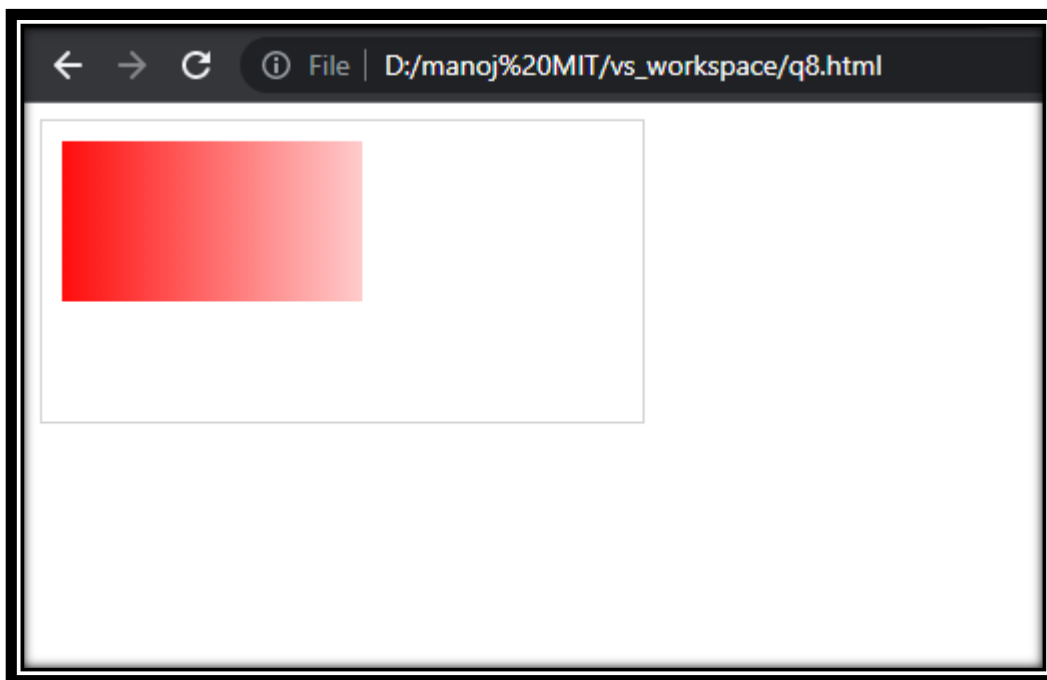
Output :



html code :

```
<!DOCTYPE html>
<html>
<head>
<title>8th question</title>
</head>
<body>
<canvas id="myCanvas" width="300" height="150" style="border:1px solid #d3d3d3;"></canvas>
<script>
var c = document.getElementById("myCanvas");
var ctx = c.getContext("2d");
var grd = ctx.createLinearGradient(0,0,200,0);
grd.addColorStop(0,"red");
grd.addColorStop(1,"white");
ctx.fillStyle = grd;
ctx.fillRect(10,10,150,80);
</script>
</body>
</html>
```

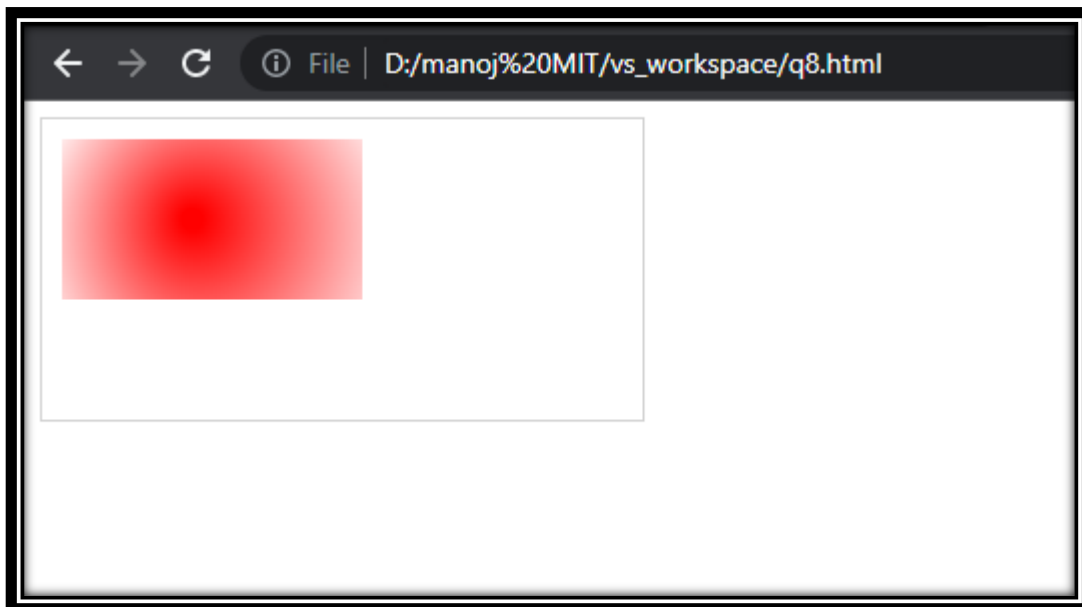
Output :



html code :

```
<!DOCTYPE html>
<html>
<head>
<title>8th question</title>
</head>
<body>
<canvas id="myCanvas" width="300" height="150" style="border:1px solid #d3d3d3;"></canvas>
<script>
var c = document.getElementById("myCanvas");
var ctx = c.getContext("2d");
var grd = ctx.createRadialGradient(75,50,5,90,60,100);
grd.addColorStop(0,"red");
grd.addColorStop(1,"white");
ctx.fillStyle = grd;
ctx.fillRect(10,10,150,80);
</script>
</body>
</html>
```

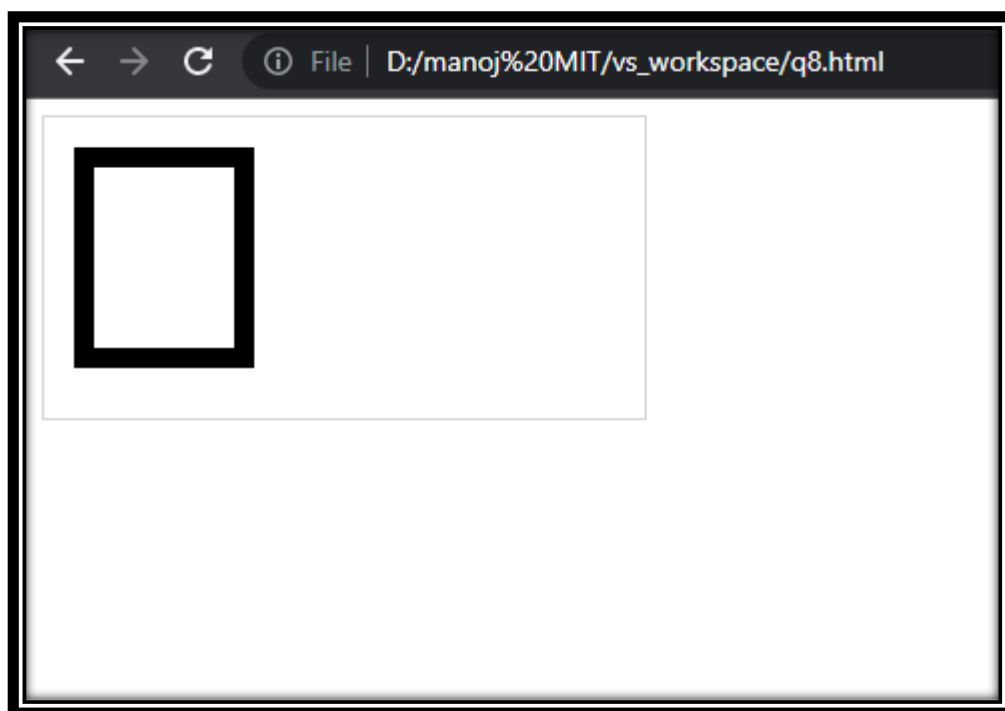
Output :



html code :

```
<!DOCTYPE html>
<html>
<head>
<title>Question Eight</title>
</head>
<body>
<canvas id="myCanvas" width="300" height="150" style="border:1px solid #d3d3d3;">
canvas.</canvas>
<script>
var c = document.getElementById("myCanvas");
var ctx = c.getContext("2d");
ctx.lineWidth = 10;
ctx.strokeRect(20, 20, 80, 100);
</script>
</body>
</html>
```

Output :

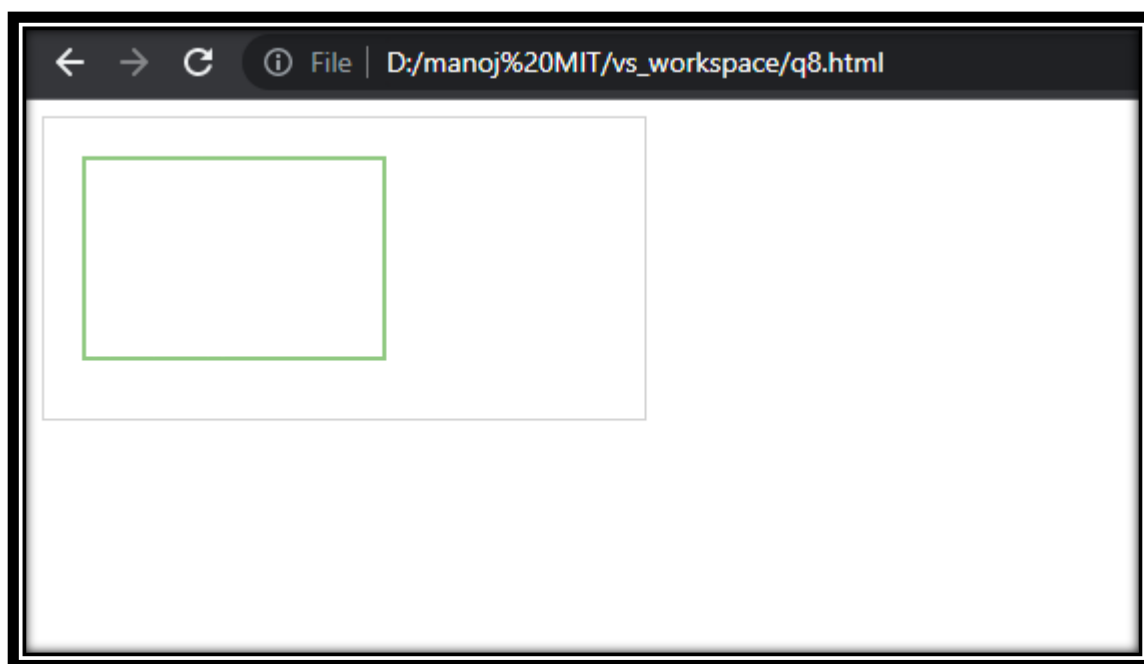




html code :

```
<!DOCTYPE html>
<html>
<head>
<title>Question Eight</title>
</head>
<body>
<canvas id="myCanvas" width="300" height="150" style="border:1px solid #d3d3d3;"></canvas>
<script>
var c = document.getElementById("myCanvas");
var ctx = c.getContext("2d");
ctx.strokeStyle = "#239505";
ctx.strokeRect(20, 20, 150, 100);
</script>
</body>
</html>
```

Output :



\*\*\*\*\*