

28th Jan Mobile Responsive and Positions Assignments:

Q.1) What are media queries in CSS and their use case?

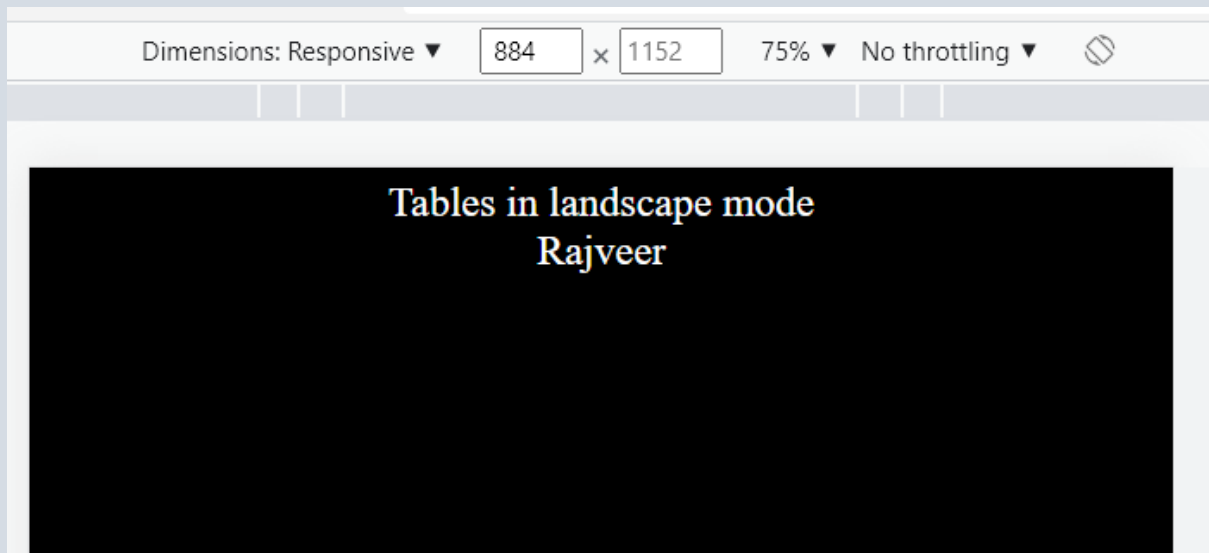
Ans.) Media queries in CSS are used to apply different styles to a web page based on the characteristics of the device displaying the page, such as screen size, screen resolution and orientation.

For example, we can use media queries to make a page look different on a large desktop screen compared to a small smartphone screen. This allows us to create a responsive design, where the page automatically adjusts to different screen sizes and provides a better user exp.

To use media queries, we add a 'media' rule to our CSS, along with a media query condition that specifies the conditions under which the styles in the rule should be applied.

For example, we can use the following media query to apply specific styles to the page when it is displayed on a screen.

```
@media (min-width:768px) and (max-width:992px){  
  /*  
    (768-992px  
    tablets in landscape  
    */  
  body{  
    background-color: #000000;  
    color: white;  
  }  
  div::after{  
    content:"Tables in landscape mode"  
  }  
}
```



Media queries are a powerful tool for creating responsive designs, and are an essential part of modern web development.

Q.2) Difference between min-width and max-width in media queries in CSS?

Ans.) In media queries, "**min-width**" and "**max-width**" are used to specify the minimum and maximum width of the viewport (*the area of the screen that displays the web page*), respectively. These are used to determine whether or not to apply specific styles based on the width of the viewport.

"min-width" sets a minimum width for the viewport below which the styles inside the media query will not be applied. For example, if we set a "min-width" of 600px, the styles inside the media query will only be applied when the viewport is at least 600px wide.

"max-width" sets a maximum width for the viewport above which the styles inside the media query will not be applied. For example, if we set a "max-width" of 800px, the styles inside the media query will only be applied when the viewport is at most 800px wide.

So, if we use both "min-width" and "max-width" in the same media query, the styles inside the media query will only be applied when the width of the viewport is within the specified range. For example, the following media query applies styles only when the width of the viewport is between 600px and 800px.

Q.3) Explain Float property and Clear property in CSS with examples.

Ans.) The "float" property in CSS is used to specify how an element should float within its parent container.

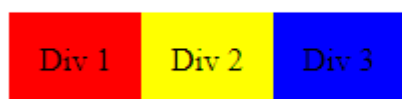
An element with **float:left** will be moved to the left side of its parent container, and subsequent elements will flow around it on the right side.

An element with **float:right** will be moved to the right side of its parent container, and subsequent elements will flow around it on the left side.

Floated elements are removed from the normal flow of the document, and they do not affect the layout of subsequent elements. This makes it useful for creating layouts with elements that are positioned side by side, such as navigation menus, images with text, and multi-column layouts.

```
<style>
  div{
    float: left;
    padding:15px;
  }
  .div1{
    background-color: red;
  }
  .div2{
    background-color: yellow;
  }
  .div3{
    background-color: blue;
  }
</style>
```

In this example , the three divs will float next to each other.



Clear Property:

The "clear" property in CSS is used to specify whether an element should allow floating elements on the left, right, or both sides.

"clear: left" means that the element will not allow any floating elements on the left side, and will be positioned below any floating elements on the left.

"clear: right" means that the element will not allow any floating elements on the right side, and will be positioned below any floating elements on the right.

"clear: both" means that the element will not allow floating elements on either the left or right side, and will be positioned below any floating elements on both sides.

The "clear" property is often used in conjunction with floated elements to ensure that subsequent elements appear below any floated elements, rather than beside them. For example, if we have a floating image on the left and we want a paragraph of text to appear below it, we can set "clear: both" on the paragraph to ensure that it appears below the floating image.

```
.div3{
  float:left;
  padding:10px;
  border:3px solid lightgreen;
}
.div4{
  padding:10px;
  border:3px solid red;
  clear:left;
}
```

div3

div4 - Here, clear: left; moves div4 down below the floating div3. The value "left" clears elements floated to the left. You can also clear "right" and "both".

Thank You 😊