MEDIA QUERY - Assignment

1. Create a simple webpage with a header, a main content section, and a footer. Apply a media query that changes the background color of the header to blue when the screen width is less than 600px.

HTML:

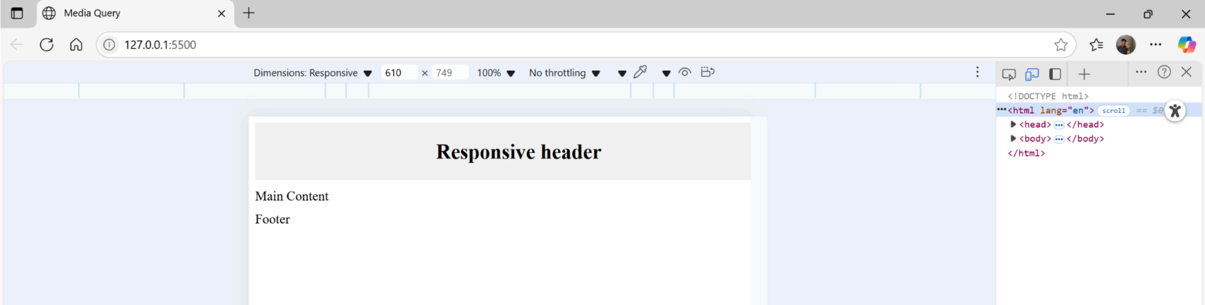
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Media Query</title>
    <link href="style.css" rel="stylesheet">
<body>
    <header>Responsive header</header>
    <main>Main Content</main>
    <footer>Footer</footer>
</body>
</html>
```

CSS:

```
header{
    background-color: #f3f3f3;
    width: 100%;
    padding: 20px;
    font-size:25px;
    font-weight:bold;
    text-align: center;
}
main{
    padding-top:10px;
}
footer{
    padding-top:10px;
}
@media screen and (max-width:600px){
    header{
        background-color:blue;
    }
}
```

OUTPUT:

NORMAL:



Dimensions: Responsive 610 × 749 100% No throttling

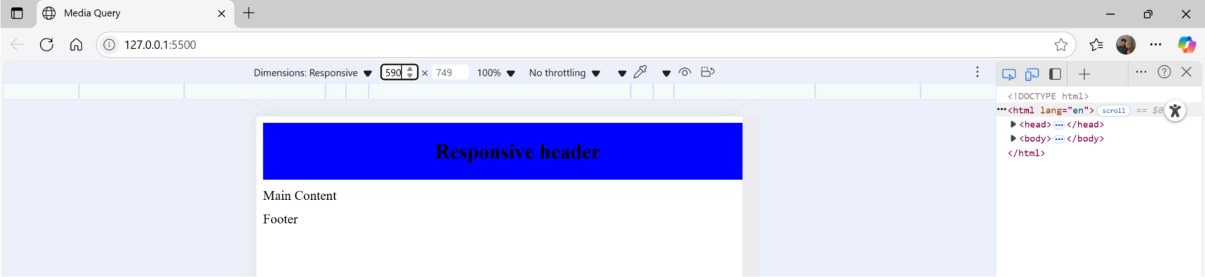
Responsive header

Main Content

Footer

```
<!DOCTYPE html>
<html lang="en"> scroll == $0
  <head> ··· </head>
  <body> ··· </body>
</html>
```

RESPONSIVE:



Dimensions: Responsive 590 × 749 100% No throttling

Responsive header

Main Content

Footer

```
<!DOCTYPE html>
<html lang="en"> scroll == $0
  <head> ··· </head>
  <body> ··· </body>
</html>
```

2. Create an image gallery with three images in a row. Use media queries to adjust the layout to two images in a row for screens smaller than 800px and one image in a row for screens smaller than 500px.

HTML:

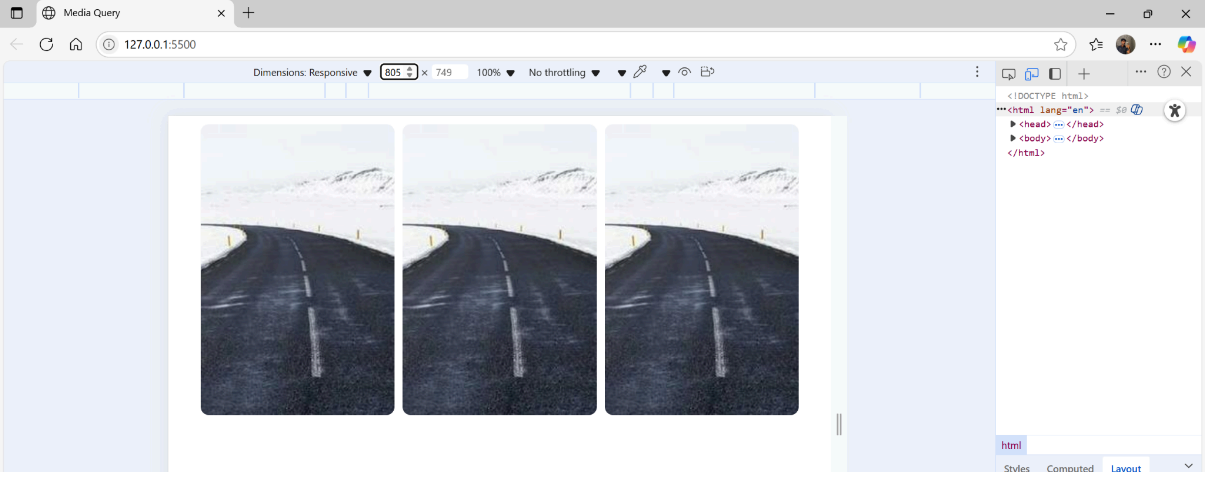
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Media Query</title>
    <link href="style.css" rel="stylesheet">
<body>
    <div class="gallery">
        <img src="Road.jpg" alt="image1" >
        <img src="Road.jpg" alt="image2" >
        <img src="Road.jpg" alt="image3" >
    </div>
</body>
</html>
```

CSS:

```
body{
    margin:0px;
    padding:0px;
}
.gallery{
    display: flex;
    flex-wrap: wrap;
    justify-content: center;
    padding: 10px;
    gap:10px;
}
.gallery img{
    width: 30%;
    height:auto;
    object-fit: cover;
    border-radius: 10px;
}
@media screen and (max-width:800px){
    .gallery img{
        width:calc(30% + 20px);
    }
}
@media screen and (max-width:500px){
    .gallery img{
        width: 100%;
    }
}
```

OUTPUT:

First: Above 800px



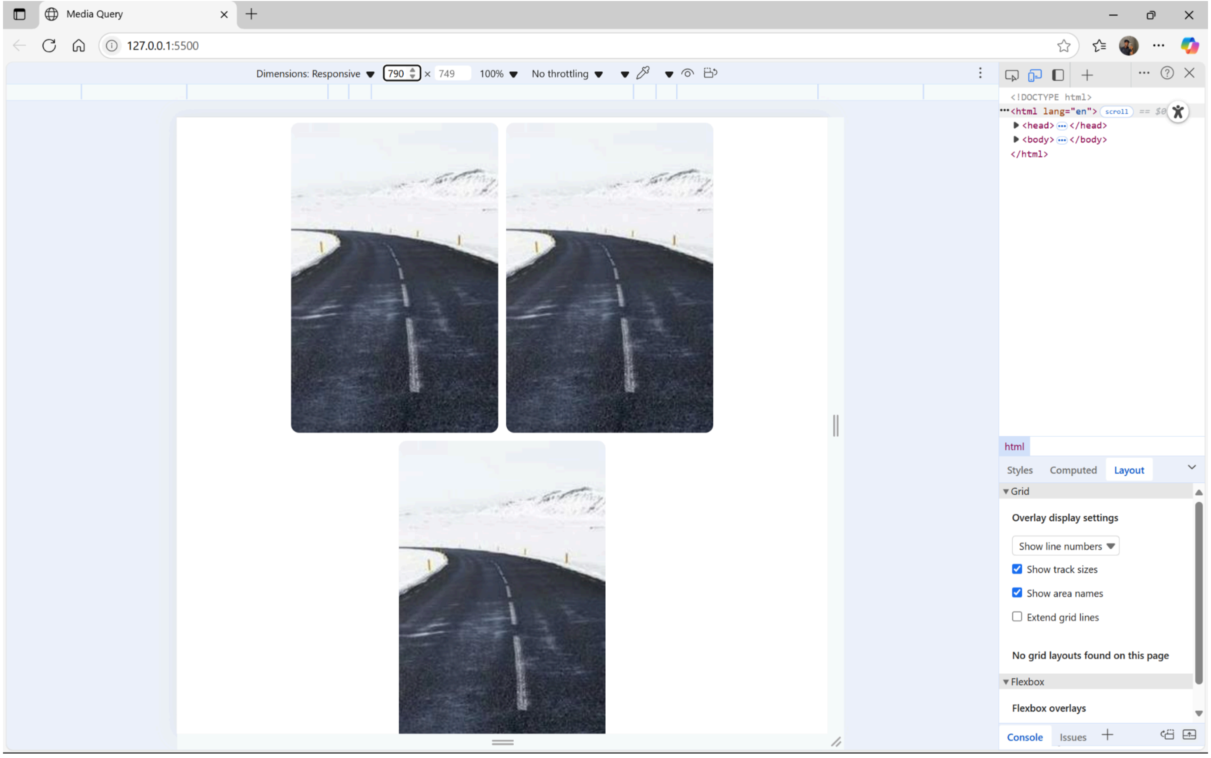
Media Query

127.0.0.1:5500

Dimensions: Responsive 805 × 749 100% No throttling

```
<!DOCTYPE html>
<html lang="en"> == $0
  <head> … </head>
  <body> … </body>
</html>
```

Second: Between 500px and 800px



Media Query

127.0.0.1:5500

Dimensions: Responsive 790 × 749 100% No throttling

```
<!DOCTYPE html>
<html lang="en"> scroll == $0
  <head> … </head>
  <body> … </body>
</html>
```

Grid

Overlay display settings

Show line numbers

☑ Show track sizes

☑ Show area names

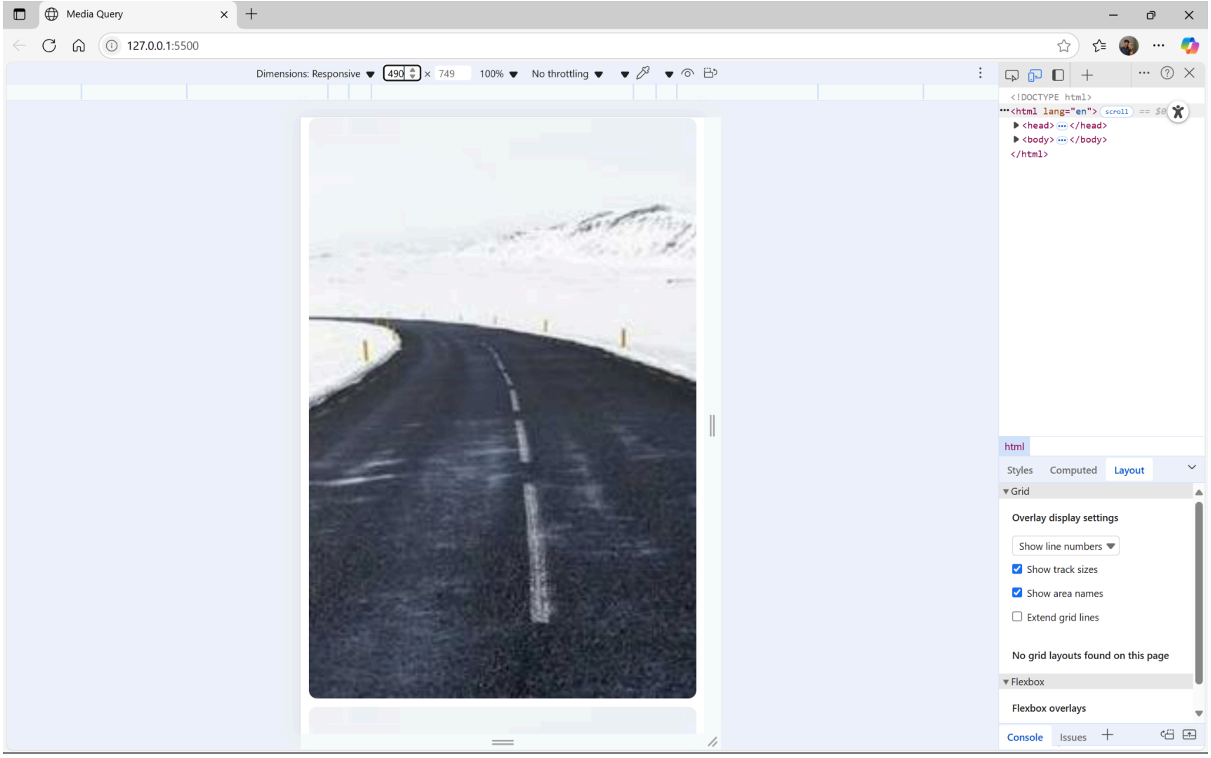
□ Extend grid lines

No grid layouts found on this page

Flexbox

Flexbox overlays

Third: Below 500px



```
<!DOCTYPE html>
<html lang="en"> scroll
  <head> … </head>
  <body> … </body>
</html>
```

3. Create a navigation bar with five links. Apply a media query that converts the navigation into a vertical list for screens smaller than 768px and also changes the background color to gray.

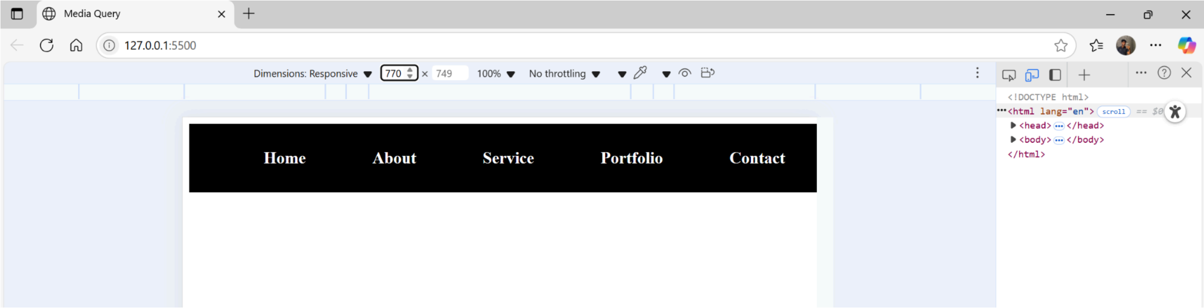
HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Media Query</title>
    <link href="style.css" rel="stylesheet">
</head>
<body>
    <nav class="navbar">
        <ul class="nav-container">
            <li><a href="">Home</a></li>
            <li><a href="">About</a></li>
            <li><a href="">Service</a></li>
            <li><a href="">Portfolio</a></li>
            <li><a href="">Contact</a></li>
        </ul>
    </nav>
</body>
</html>
```

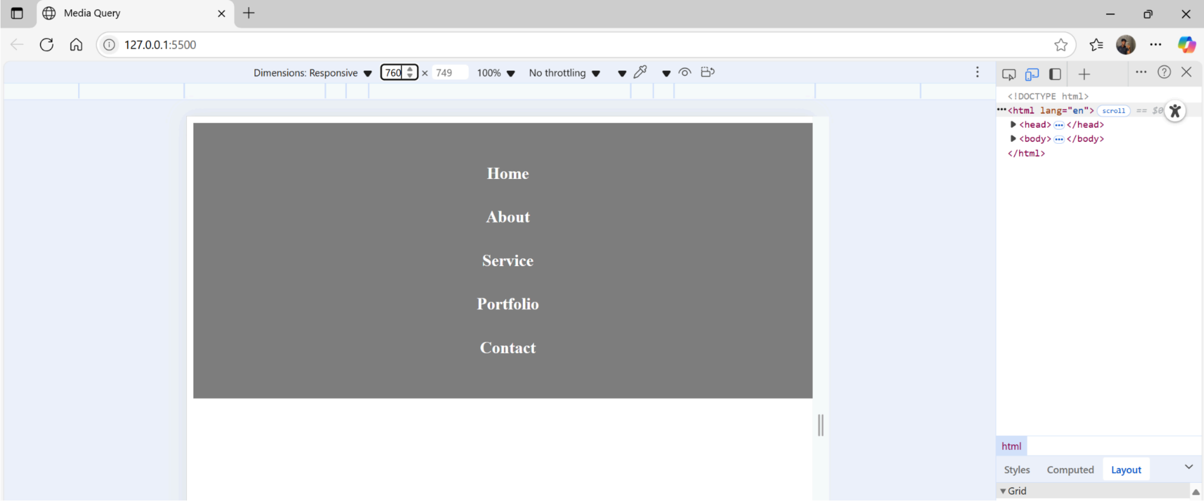
CSS:

```
.navbar{
    background-color:black;
    width:100%;
    padding: 10px;
}
.nav-container{
    display: flex;
    list-style: none;
    justify-content: space-around;
    font-size:20px;
    font-weight:bold;
}
.nav-container li a{
    text-decoration: none;
    color: white;
}
li a:hover{
    background-color: white;
    color: black;
    padding:10px;
    transition: 0.2s ease-in-out;
}
@media screen and (max-width:768px){
    .navbar{
        background-color: gray;
    }
    .nav-container{
        display: flex;
        flex-direction: column;
        align-items: center;
        padding: 20px;
        gap:30px;
    }
}
```

OUTPUT: 768px<



768px>



---

4. Create a grid based layout containing four grid items which arranges them as the screen size changes.

HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Media Query</title>
    <link href="style.css" rel="stylesheet">
</head>
<body>
```

```html
    <div class="container">
        <div class="box box1">Box1</div>
        <div class="box box2">Box2</div>
        <div class="box box3">Box3</div>
        <div class="box box4">Box4</div>
    </div>
</body>
</html>
```

CSS:

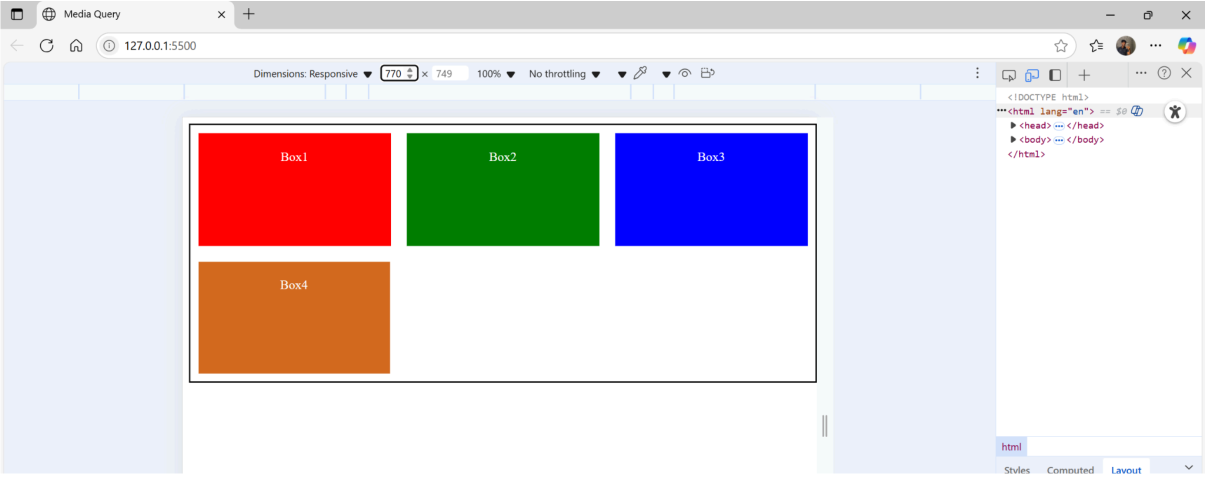
```css
.container{
    border:2px solid black;
    display: grid;
    grid-template-columns: 1fr 1fr 1fr;
    width:fit-content;
    color: white;
}
.box{
    margin: 10px;
    display: flex;
    justify-content: center;
    width:200px;
    height: 100px;
    padding: 20px;
}
.box1{
    border:1px solid red;
    background-color: red;
}
.box2{
    border:1px solid green;
    background-color: green;

}
.box3{
    border:1px solid blue;
    background-color: blue;
}
.box4{
    border:0px solid chocolate;
    background-color: chocolate;
}
```

```
@media screen and (max-width:768px){
    .container{
        display:grid;
        grid-template-columns: 1fr 1fr;
        grid-template-rows: 1fr 1fr;
    }
}
@media screen and (max-width:576px){
    .container{
        display:grid;
        grid-template-columns: 1fr;
        grid-template-rows: 1fr;
    }
}
```

OUTPUT:

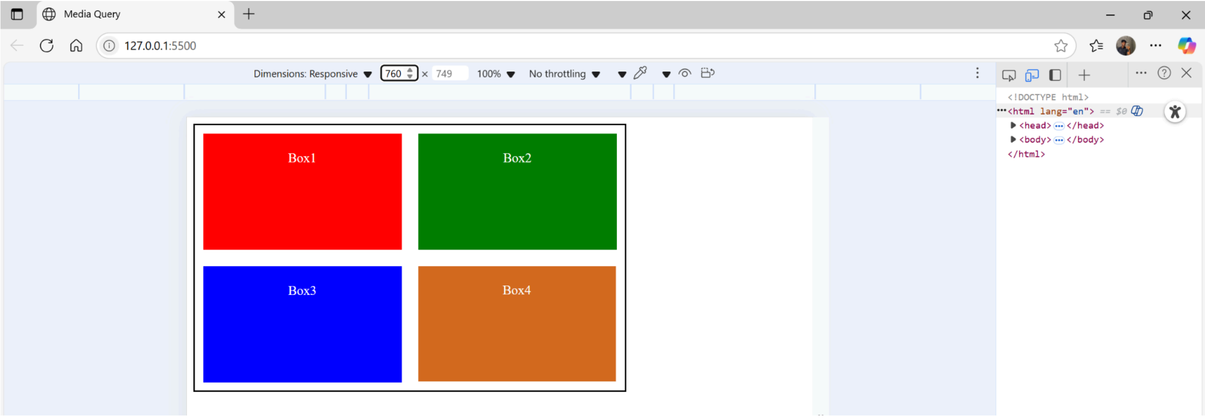
NORMAL:



Dimensions: Responsive 770 × 749 100% No throttling

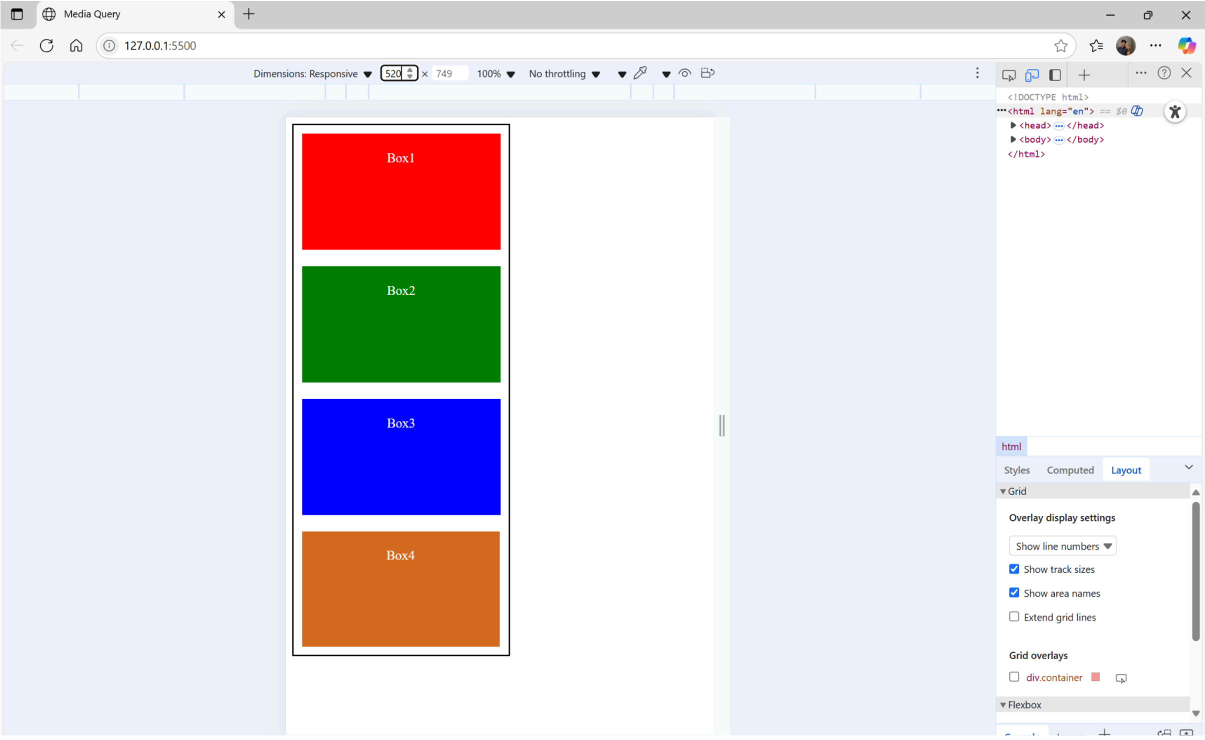
```
<!DOCTYPE html>
<html lang="en"> == $0
  <head> ⋯ </head>
  <body> ⋯ </body>
</html>
```

RESPONSIVE:



Dimensions: Responsive 760 × 749 100% No throttling

```
<!DOCTYPE html>
<html lang="en"> == $0
  <head> ⋯ </head>
  <body> ⋯ </body>
</html>
```



```
<!DOCTYPE html>
<html lang="en">
▶ <head> … </head>
▶ <body> … </body>
</html>
```

5. Create the below given layout using the flexbox in css, which should adapt itself on mobile screen as per given below output.

HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Media Query</title>
    <link href="style.css" rel="stylesheet">
</head>
<body>
    <div class="container">
        <div class="header">Box1</div>
        <div class="main">
            <div class="sidebar">Box2</div>
            <div class="content">Box3</div>
        </div>
        <div class="footer">Box4</div>
    </div>
```

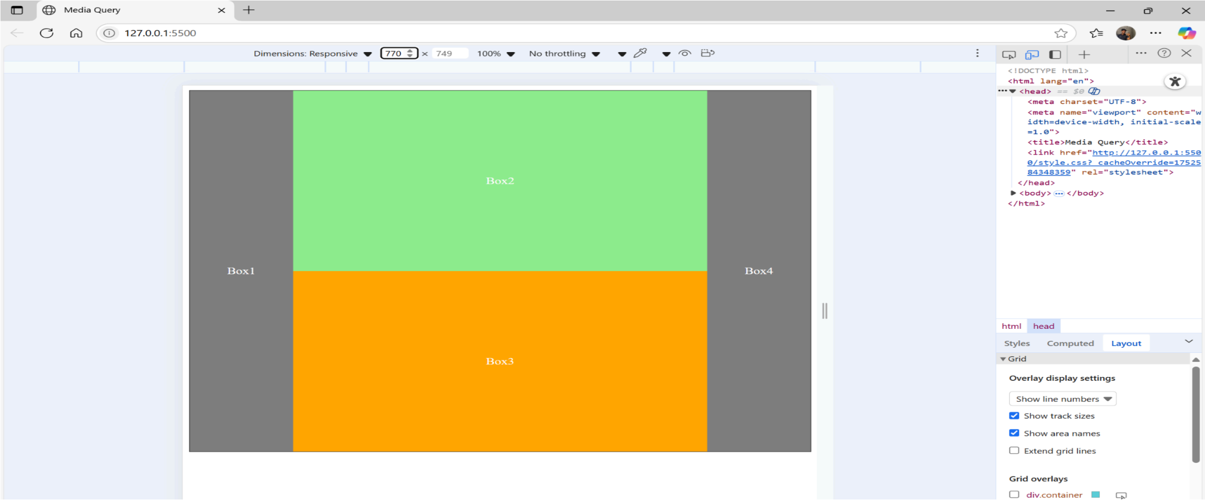
```
</body>
</html>
```

CSS:

```
.container{
    border:1px solid black;
    display: grid;
    grid-template-columns: 1fr 4fr 1fr;
    width:100%;
    height:100%;
}
.header{
    background-color: gray;
    display: flex;
    justify-content: center;
    align-items: center;
    color:white;
}
.main{
    display: grid;
    grid-template-columns: 1fr;
    color: white;
    height: 600px;
}
.sidebar{
    display: flex;
    justify-content: center;
    align-items: center;
    background-color: lightgreen;
    padding: 20px;
}
.content{
    display: flex;
    justify-content: center;
    align-items: center;
    background-color: orange;
    padding: 20px;
}
.footer{
    background-color: gray;
    display: flex;
    justify-content: center;
    align-items: center;
    color: white;
    padding: 10px;
}
@media screen and (max-width:768px){
    .container{
        display: grid;
        grid-template-columns:1fr;
    }
    .header{
        padding: 20px;
    }
    .main{
        display: grid;
        grid-template-rows: 1fr 9fr;
    }
    .sidebar{
        height: 20px;
    }
    .content{
        height:20px;
    }
    .footer{
        padding: 20px;
    }
}
```

OUTPUT:

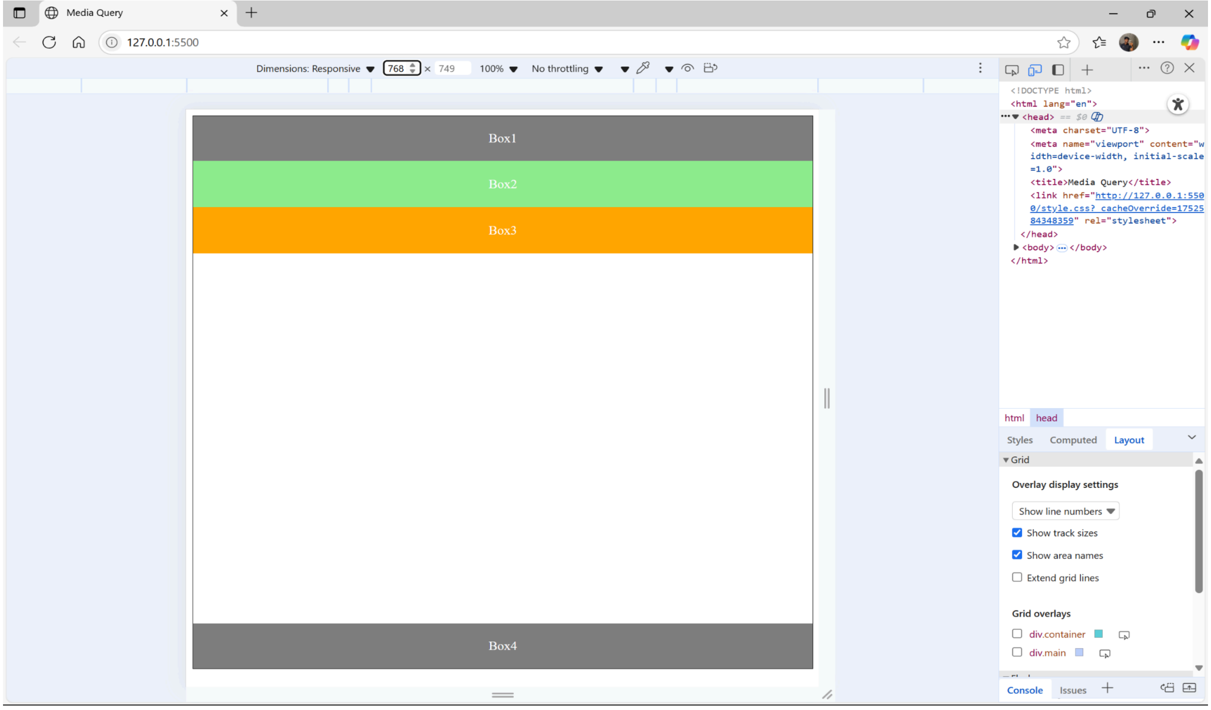
Normal:



```
<!DOCTYPE html>
<html lang="en">
  <head> == $0
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Media Query</title>
    <link href="http://127.0.0.1:5500/style.css?_cacheOverride=1752584348359" rel="stylesheet">
  </head>
  <body> ⋯ </body>
</html>
```

☑ Show track sizes
☑ Show area names
☐ Extend grid lines
☐ div.container

Responsive:



```
<!DOCTYPE html>
<html lang="en">
  ▼ <head> == $0
      <meta charset="UTF-8">
      <meta name="viewport" content="width=device-width, initial-scale=1.0">
      <title>Media Query</title>
      <link href="http://127.0.0.1:5500/style.css?_cacheOverride=1752584348359" rel="stylesheet">
    </head>
  ▶ <body> ··· </body>
</html>
```

▼ Grid

Overlay display settings

Show line numbers ▼

☑ Show track sizes

☑ Show area names

☐ Extend grid lines

Grid overlays

☐ div.container

☐ div.main