Flexbox

Flexbox makes it easier to design flexible responsive layout structure without using float or positioning.

Display:flex

```html
<body>
  <div class="main-div">
    <div class="flex-container">
      <div>First Div</div>
      <div>Second Div</div>
      <div>Third Div</div>
      <div>Fourth Div</div>
      <div>Fifth Div</div>
      <div>Sixth Div</div>
    </div>
  </div>
</body>
```

```html
<style>
  .flex-container {
    display: flex;
    background-color: ▢rebeccapurple;
  }

  .flex-container>div {
    background-color: ▢#f1f1f1;
    margin: 10px;
    padding: 20px;
    font-size: 30px;
  }
</style>
```
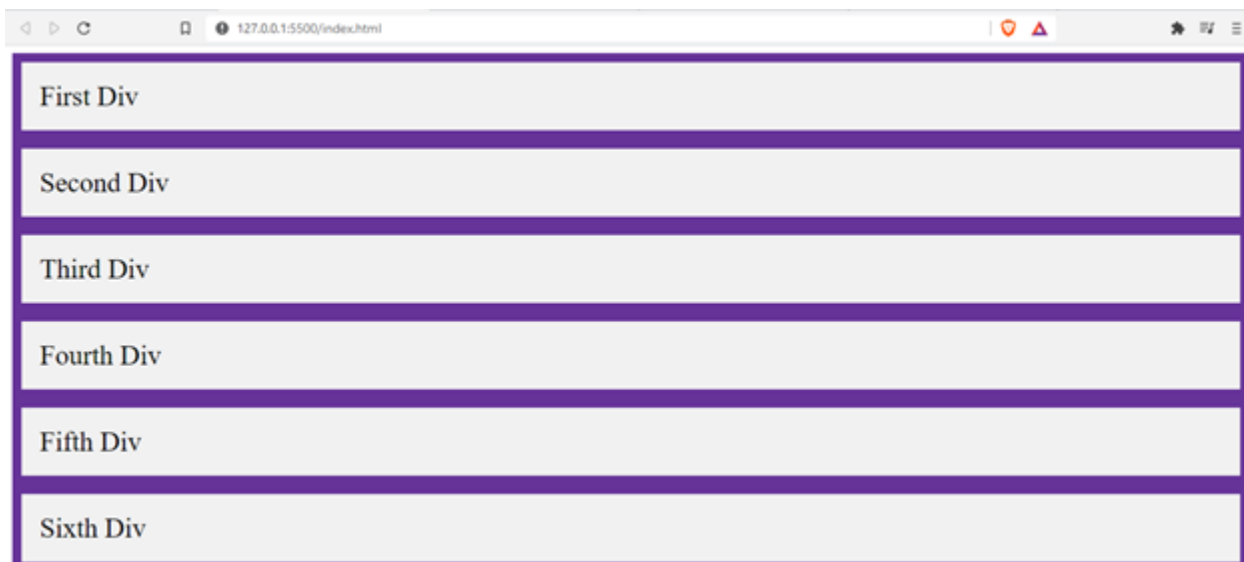
Output:

The flex-direction property defines in which direction the container wants to stack the flex items.

```css
.flex-container {
  display: flex;
  background-color: ▢rebeccapurple;
  flex-direction: column;
  /* column-reverse row row-reverse*/
}
```
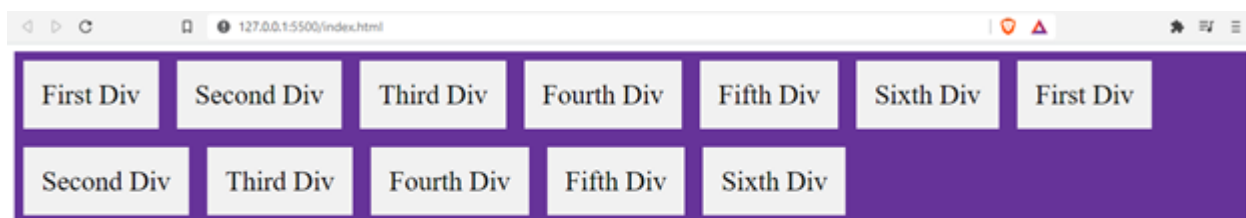
Output:

The flex-wrap property specifies whether the flex items should wrap or not.

```css
.flex-container {
  display: flex;
  background-color: rebeccapurple;
  flex-direction: column;
  /* column-reverse row row-reverse*/
  flex-wrap: wrap;
  /* nowrap  wrap-reverse */
}
```

Output:

Nowrap demo:

```css
.flex-container {
  display: flex;
  background-color: rebeccapurple;
  flex-direction: column;
  /* column-reverse row row-reverse*/
  flex-wrap: nowrap;
  /* wrap  wrap-reverse */
}
```
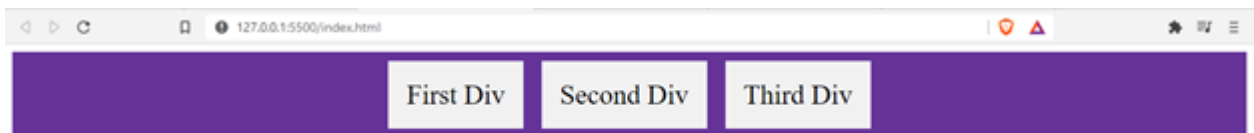
Output:

The justify-content property is used to align the flex items.

```css
.flex-container {
  display: flex;
  background-color: ■rebeccapurple;
  flex-direction: column;
  /* column-reverse row row-reverse*/
  flex-wrap: wrap;
  /* nowrap  wrap-reverse */
  justify-content: center;
}
```
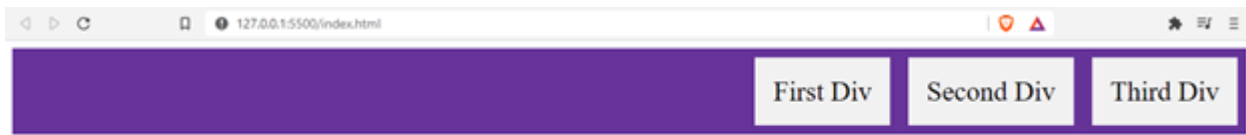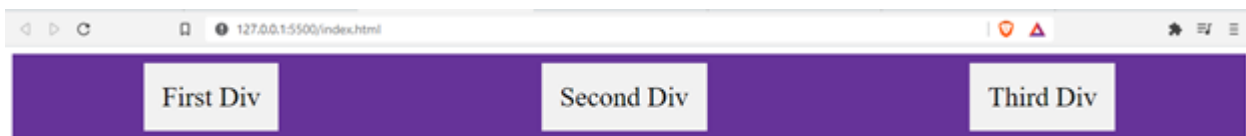
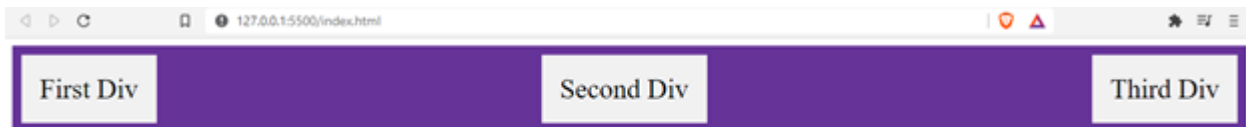Output:

justify-content:flex-start

justify-content:flex-end
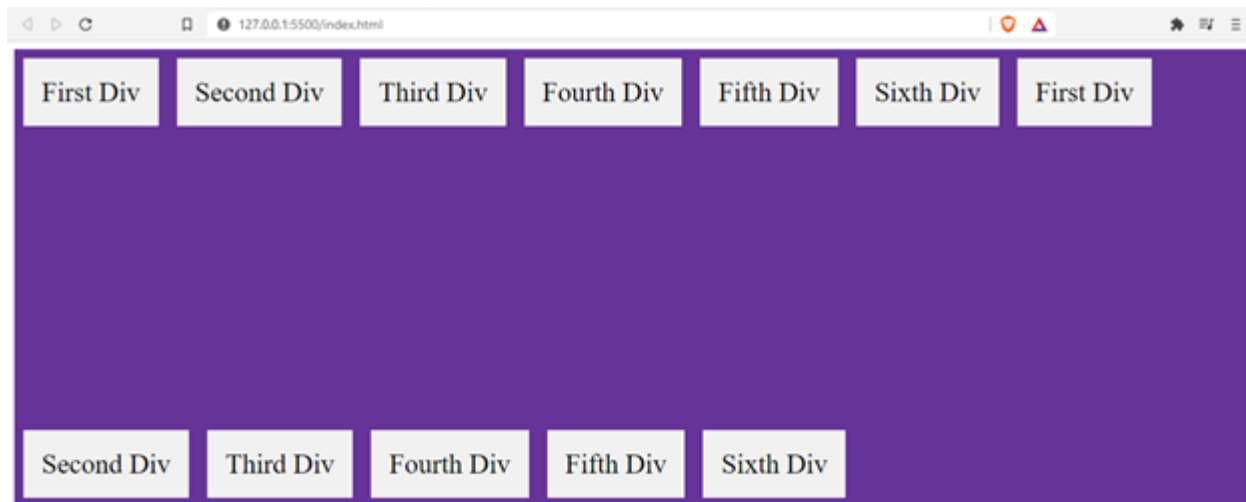

justify-content:space-around

justify-content:space-between

The align-content property is used to align the flex lines. (align-content requires height property to function properly)

```
.flex-container {
  display: flex;
  background-color: ■rebeccapurple;
  flex-direction: row;
  /* column-reverse row row-reverse*/
  flex-wrap: wrap;
  /* wrap  wrap-reverse */
  height: 500px;
  align-content: space-between;
  /* stretch (default) space-around center flex-start flex-end */
}
```
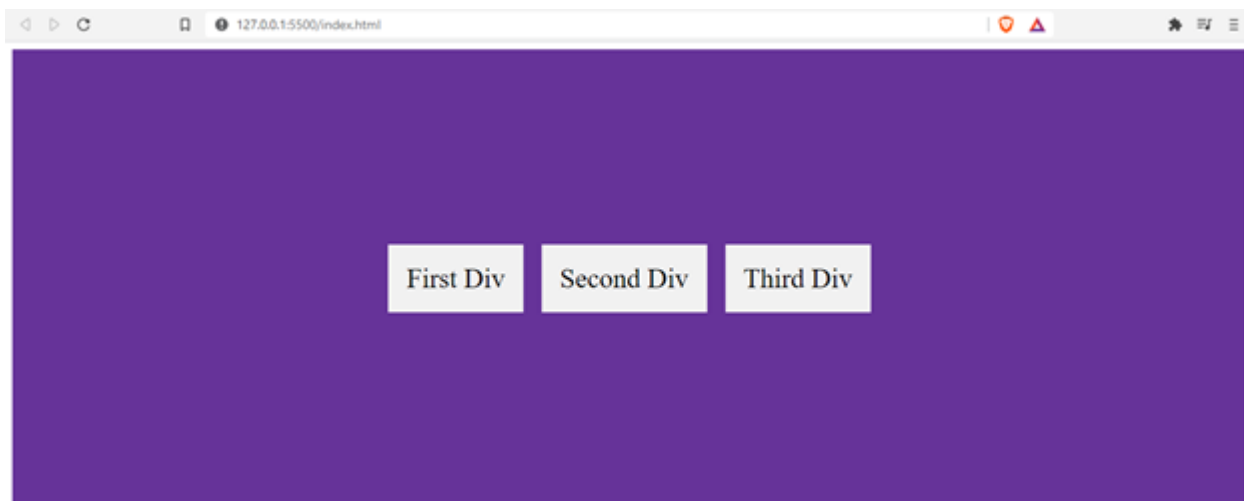
Output:

For perfect centering, we need to set both the justify-content and align-items properties to center.

```css
.flex-container {
  display: flex;
  background-color: rebeccapurple;
  flex-direction: row;
  /* column-reverse row row-reverse*/
  flex-wrap: wrap;
  /* wrap  wrap-reverse */
  align-items: center;
  /* flex-start flex-end stretch(default) baseline */
  justify-content: center;
  height: 500px;
}
```

Output:

Note:

- Justify-content is used for horizontal aligning of the items.
- Align-content is used for vertical aligning of the items.