

Introduction to Flexbox

```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
  }
  .item {
    width: 50px;
  }
</style>
```

Here, the items will take up equal space inside the parent, once their widths are set to maximum, because they are constraint by the parent. All the children will be in one row always, unless wrapping is used.

```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
  }
  .item {
    width: 500px;
  }
</style>
```

```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
    flex-direction: row-reverse;
  }
  .item {
    width: 50px;
  }
</style>
```



1 2 3 4 5



1 2 3 4 5



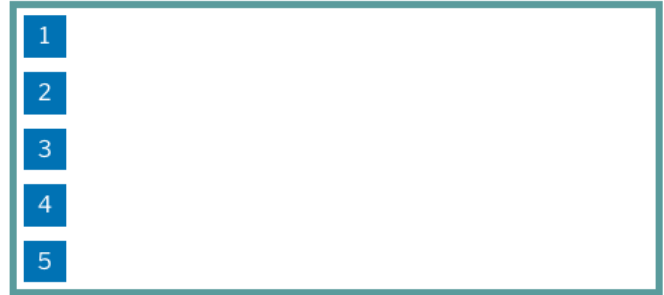
5 4 3 2 1

```

<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
.parent {
  display: flex;
  flex-direction: column;
}
.item {
  width: 50px;
}
</style>

```

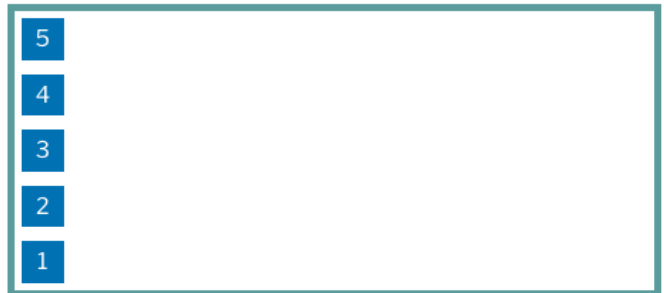


```

<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
.parent {
  display: flex;
  flex-direction: column-reverse;
}
.item {
  width: 50px;
}
</style>

```

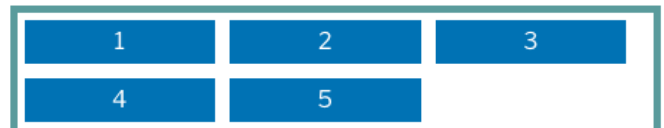


```

<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
.parent {
  display: flex;
  flex-wrap: wrap;
}
.item {
  width: 30%;
}
</style>

```

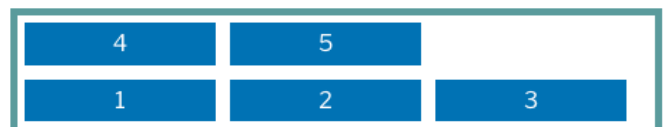


```

<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
.parent {
  display: flex;
  flex-wrap: wrap-reverse;
}
.item {
  width: 30%;
}
</style>

```



`justify-content: flex-start` will look like the first example.

```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
    justify-content: flex-end;
  }
  .item {
    width: 30%;
  }
</style>
```



```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
    justify-content: center;
  }
  .item {
    width: 50px;
  }
</style>
```



```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
    justify-content: space-between;
  }
  .item {
    width: 50px;
  }
</style>
```



```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

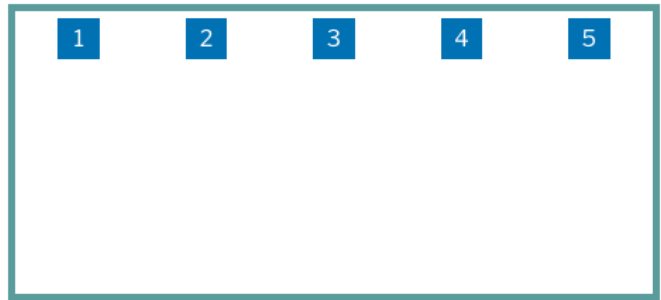
<style>
  .parent {
    display: flex;
    justify-content: space-around;
  }
  .item {
    width: 50px;
  }
</style>
```



The point to note is that `align-items` work on the Y-axis, whereas, `justify-content` works on X-axis.

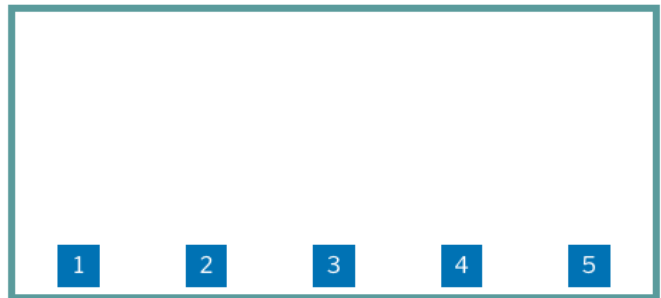
```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
    justify-content: space-around;
    height: 200px;
    align-items: flex-start;
  }
  .item {
    width: 50px;
  }
</style>
```



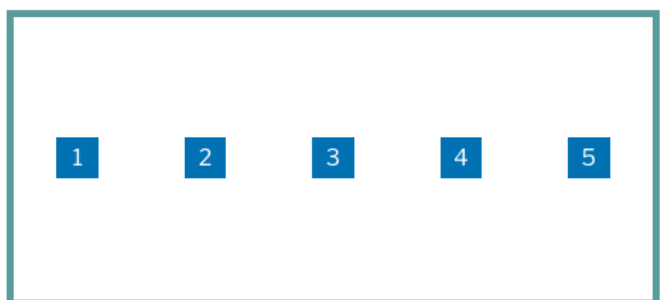
```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
    justify-content: space-around;
    height: 200px;
    align-items: flex-end;
  }
  .item {
    width: 50px;
  }
</style>
```



```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
    justify-content: space-around;
    height: 200px;
    align-items: center;
  }
  .item {
    width: 50px;
  }
</style>
```

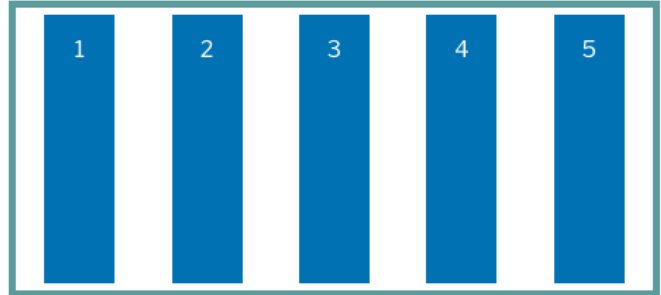


```

<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
    justify-content: space-around;
    height: 200px;
    align-items: stretch;
  }
  .item {
    width: 50px;
  }
</style>

```

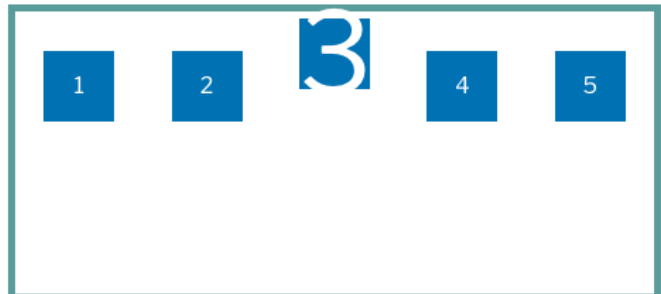


```

<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
    justify-content: space-around;
    height: 200px;
    align-items: baseline;
  }
  .item {
    width: 50px;
  }
  .item:nth-child(3) {
    font-size: 80px;
  }
</style>

```

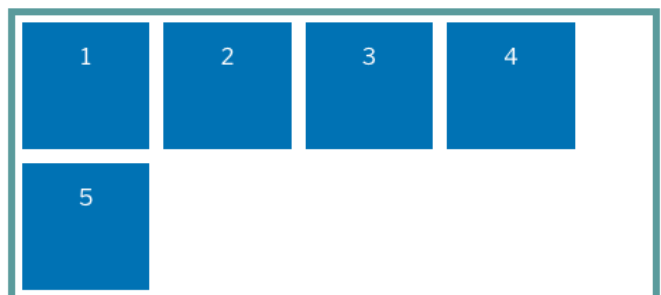


```

<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
    height: 200px;
    flex-wrap: wrap;
    align-content: stretch;
  }
  .item {
    width: 20%;
  }
</style>

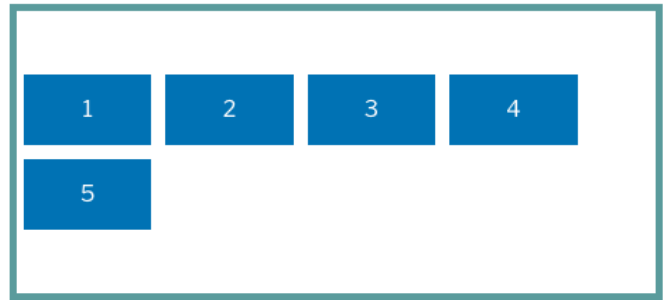
```



Similarly, `align-content` works on the Y-axis and has `flex-start`, `flex-end`, `space-around`, `space-between`.

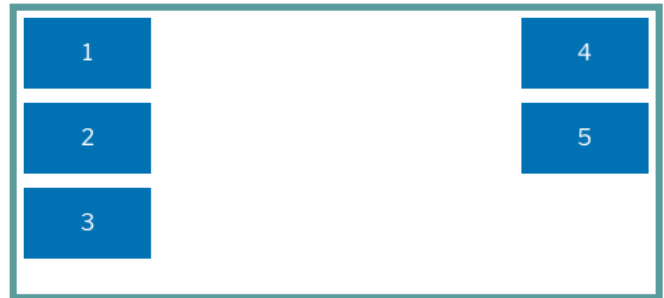
```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
    height: 200px;
    flex-wrap: wrap;
    align-content: center;
  }
  .item {
    width: 20%;
  }
</style>
```



```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

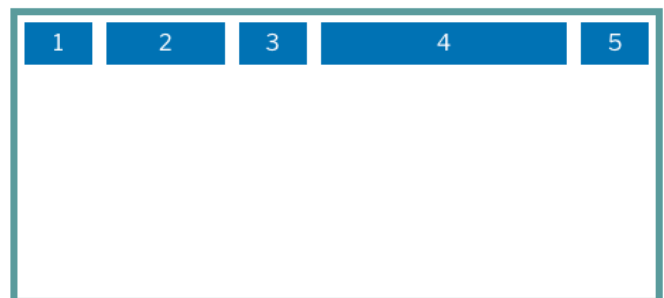
<style>
  .parent {
    display: flex;
    height: 200px;
    flex-wrap: wrap;
    align-content: space-between;
    flex-direction: column;
  }
  .item {
    width: 20%;
  }
</style>
```



Here, `flex-grow: 1`; is default. Also, `flex-shrink` works in the same way, but it only reduces the width of the element.

```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

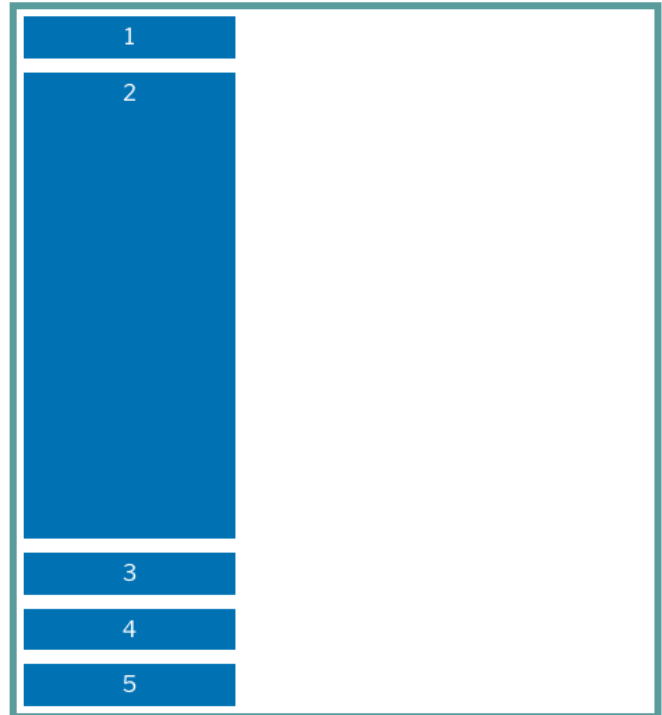
<style>
  .parent {
    display: flex;
    height: 200px;
  }
  .item {
    flex-grow: 1;
  }
  .item:nth-child(2) {
    flex-grow: 3;
  }
  .item:nth-child(4) {
    flex-grow: 8;
  }
</style>
```



The following code `flex: 2 3 30px` depicts `flex-grow: 2`, `flex-shrink: 3` and `flex-basis: 30px`.

```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

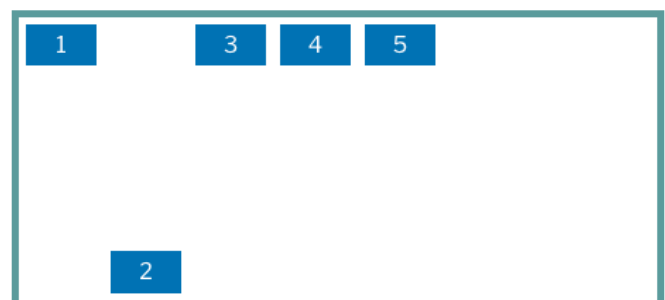
<style>
  .parent {
    display: flex;
    height: 500px;
    flex-direction: column;
  }
  .item {
    width: 150px;
  }
  .item:nth-child(2) {
    flex: 2 3 30px;
  }
</style>
```



Here, `align-self: flex-end` is the default and other property is `center` and `stretch` as shown below.

```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
    height: 200px;
  }
  .item {
    width: 50px;
  }
  .item:nth-child(2) {
    align-self: flex-end;
  }
</style>
```



Here, height is over-ridden to auto so as to show the functionality of `stretch` as `item` class already sets the height.

```
<div class="parent">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>

<style>
  .parent {
    display: flex;
    height: 200px;
  }
  .item {
    width: 50px;
  }
  .item:nth-child(2) {
    align-self: stretch;
    height: auto;
  }
</style>
```

