



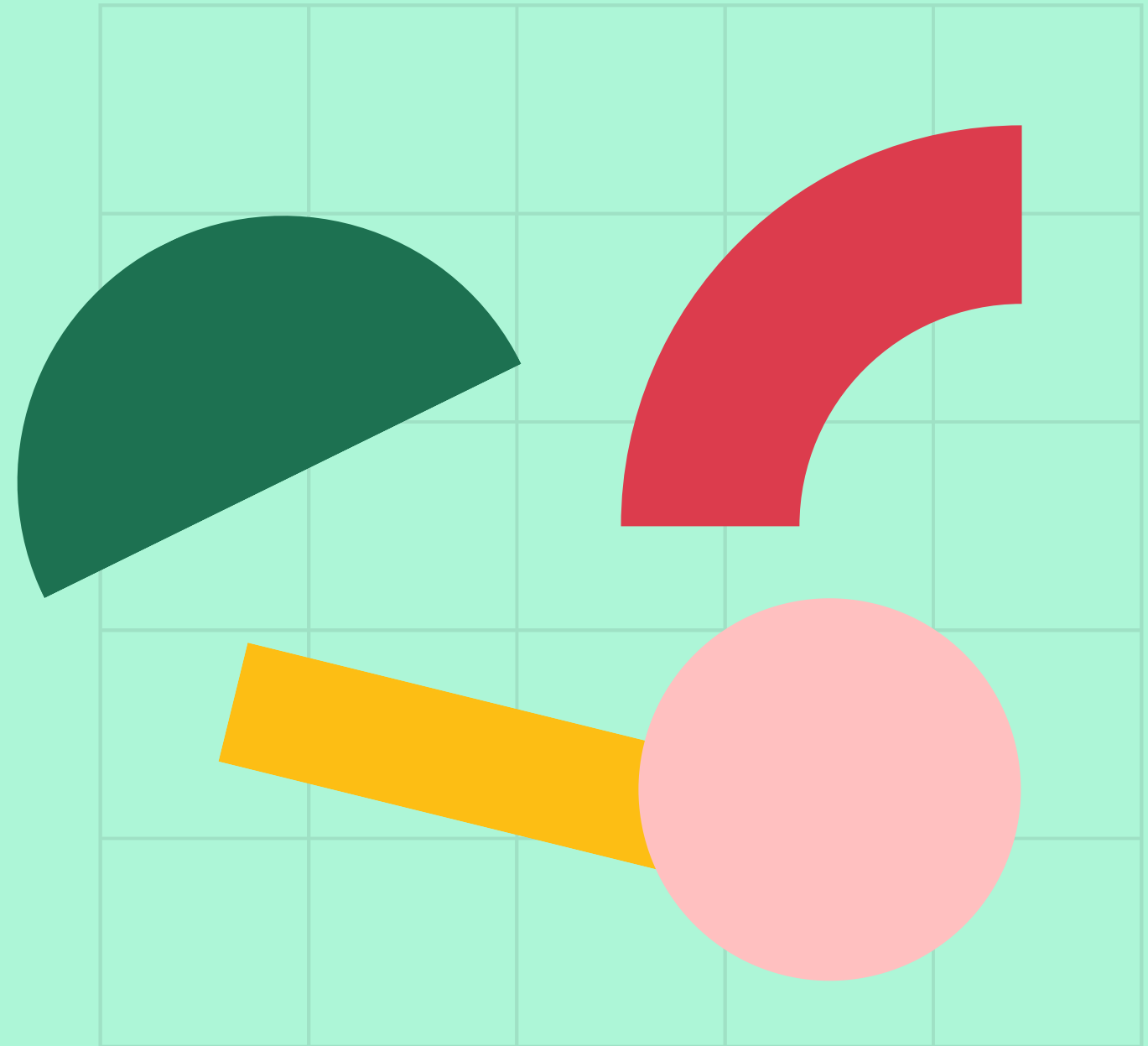
Responsive CSS and Flexbox

Course for Beginners

Unit Goals

what we'll cover

- CSS Flexbox
- Flex sizing properties
- responsive design
- media queries





FLEXBOX

WHAT IS IT?

Flexbox is one-dimensional layout method for laying out items in rows or columns.

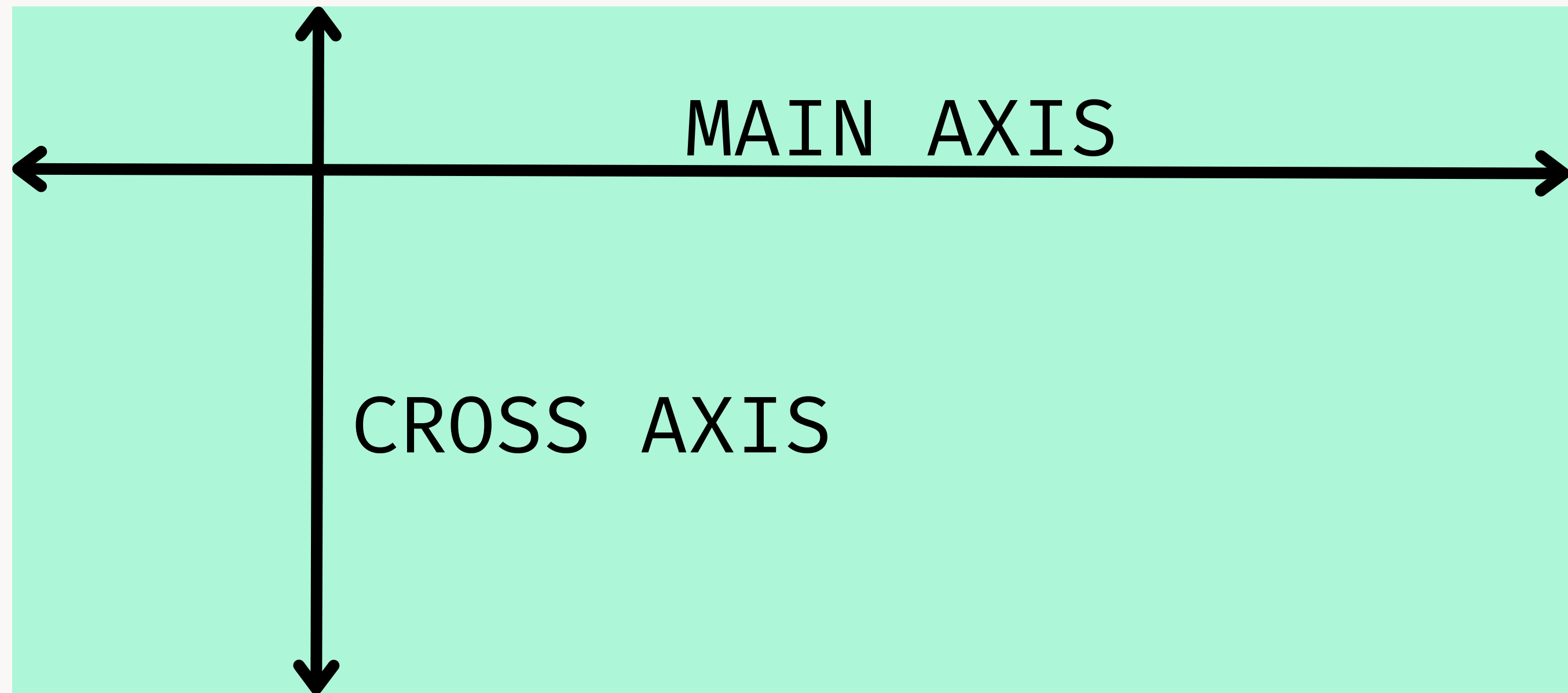
IT'S NEW(ISH)

Flexbox is a recent addition to CSS, included to address common layout frustrations.

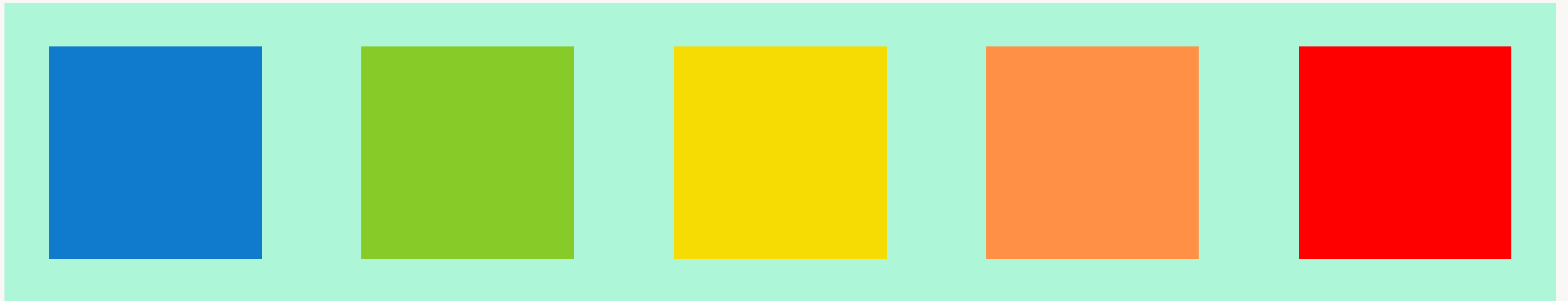
WHY "FLEX"?

Flexbox allows us to distribute space dynamically across elements of an unknown size, hence the term "flex".

THE FLEX MODEL

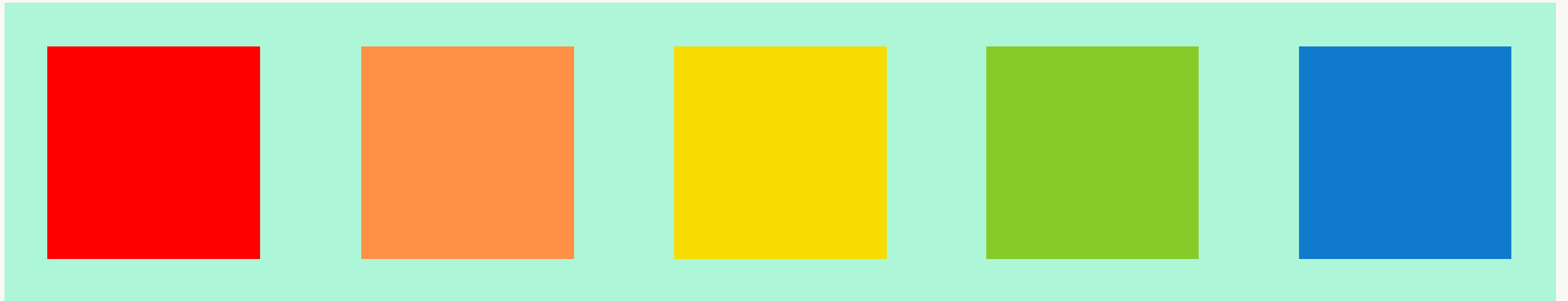


FLEX DIRECTION



```
flex-direction: row;
```

FLEX DIRECTION



```
flex-direction: row-reverse;
```

FLEX DIRECTION

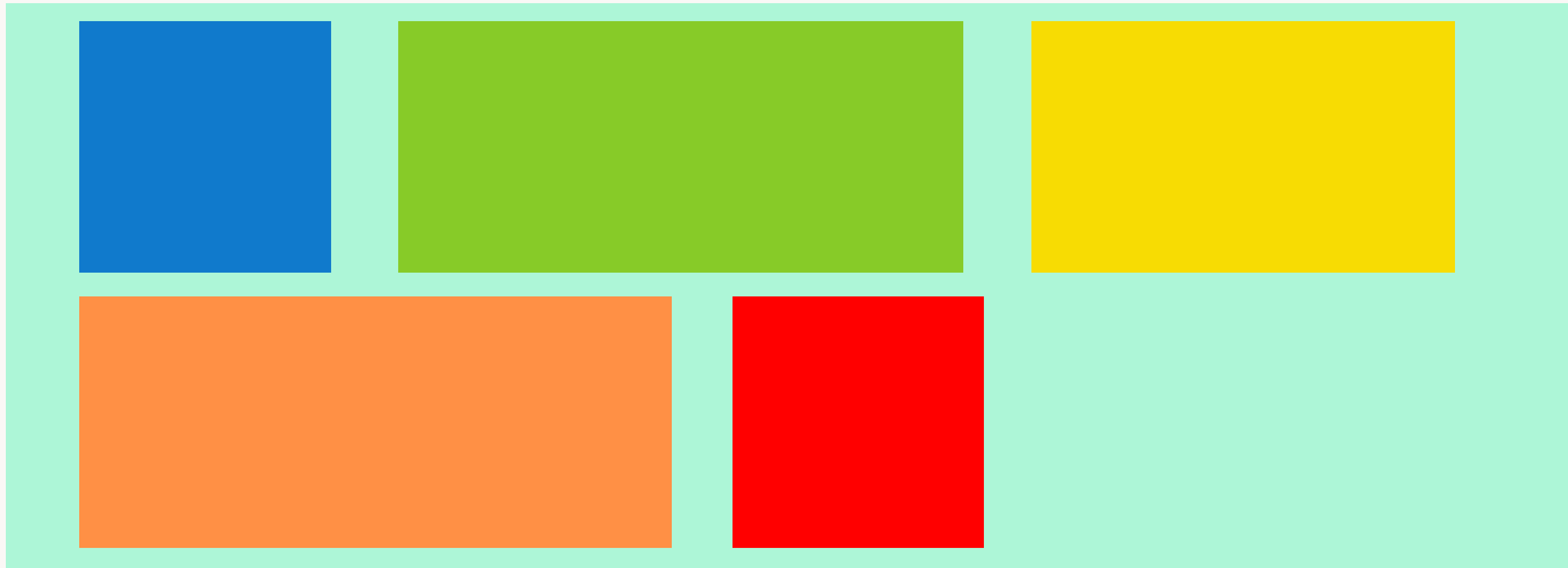


```
flex-direction: column;
```



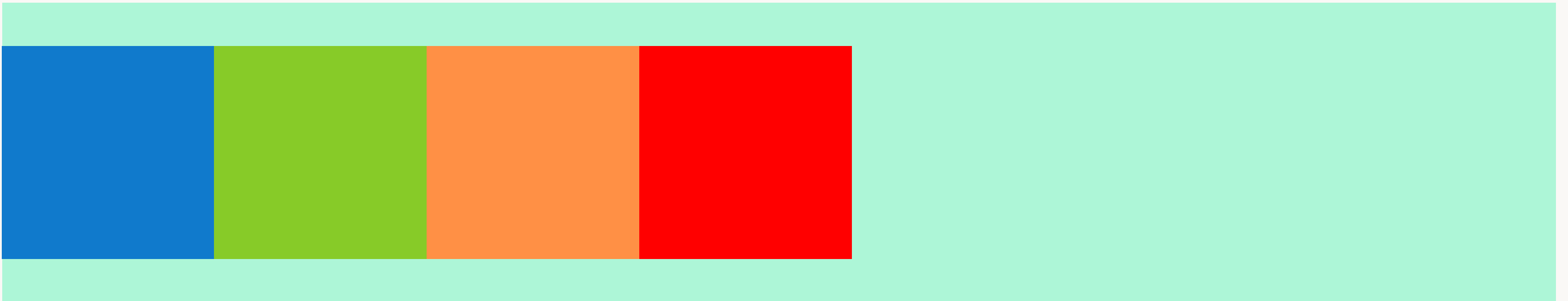
```
flex-direction: column-reverse;
```

FLEX WRAP



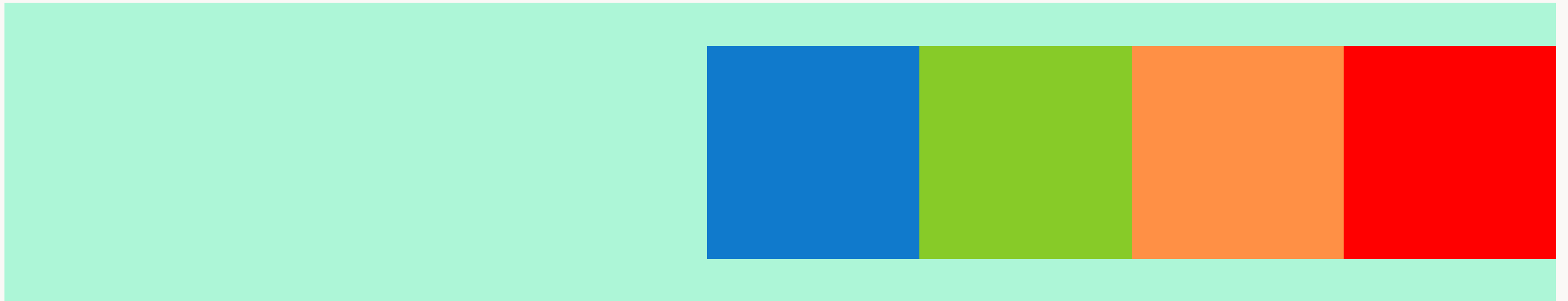
```
flex-wrap: wrap;
```


JUSTIFY CONTENT



```
justify-content: flex-start;
```

JUSTIFY CONTENT



```
justify-content: flex-end;
```

JUSTIFY CONTENT



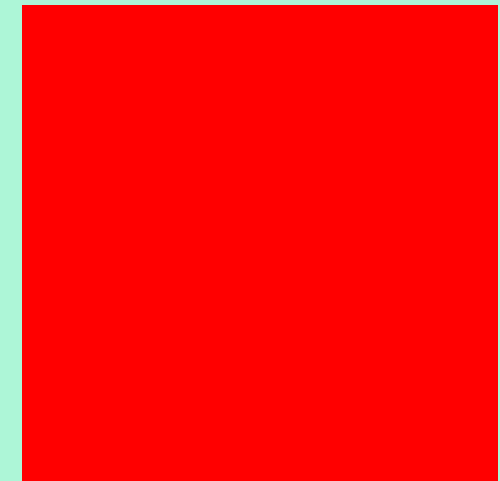
```
justify-content: center;
```

JUSTIFY CONTENT



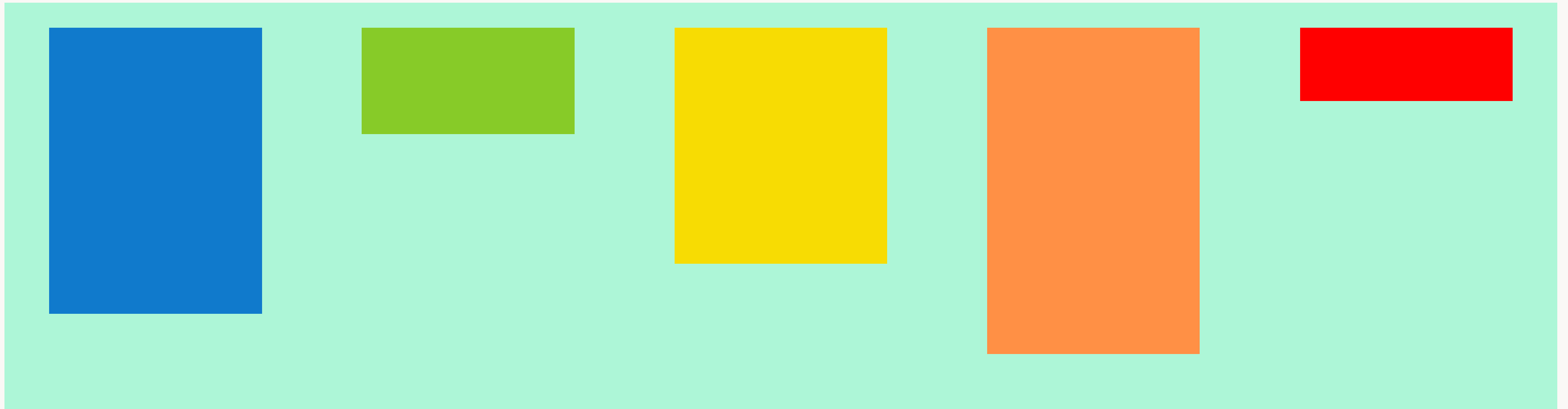
```
justify-content: space-between;
```

JUSTIFY CONTENT



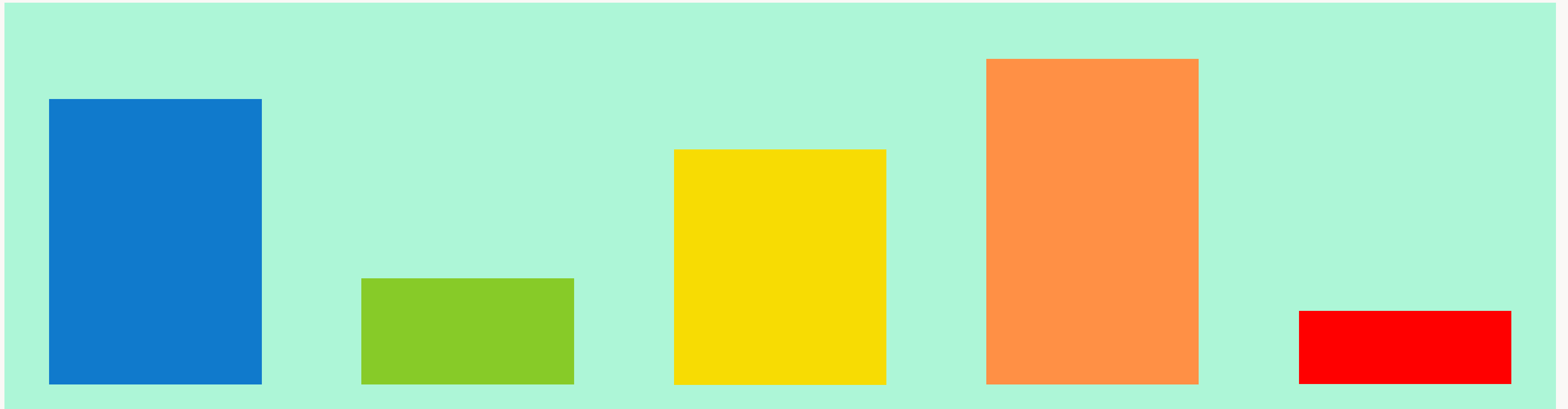
```
justify-content: space-around;
```

ALIGN ITEMS



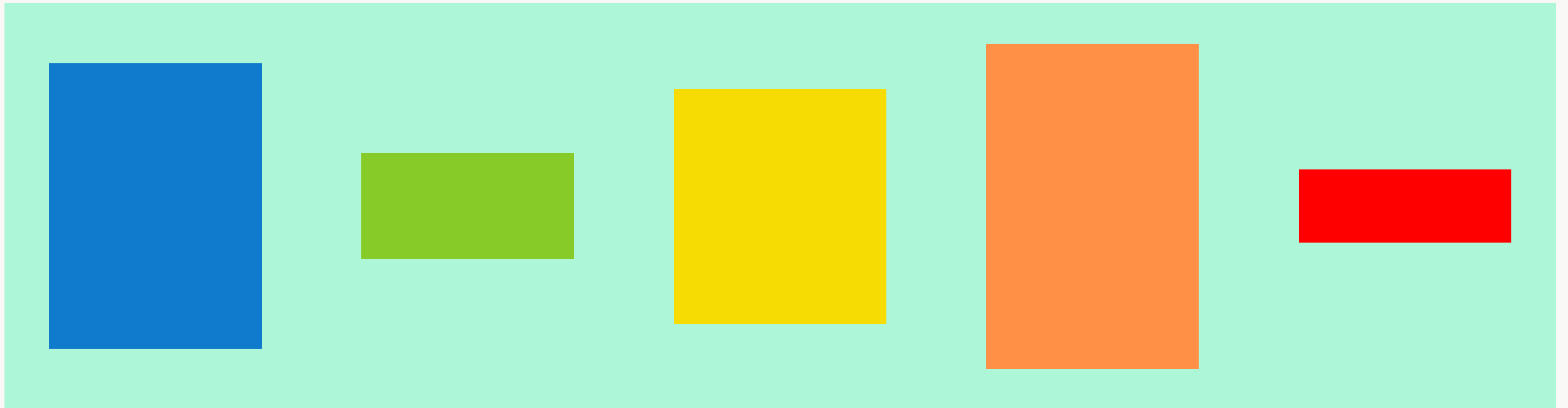
```
align-items: flex-start;
```

ALIGN ITEMS



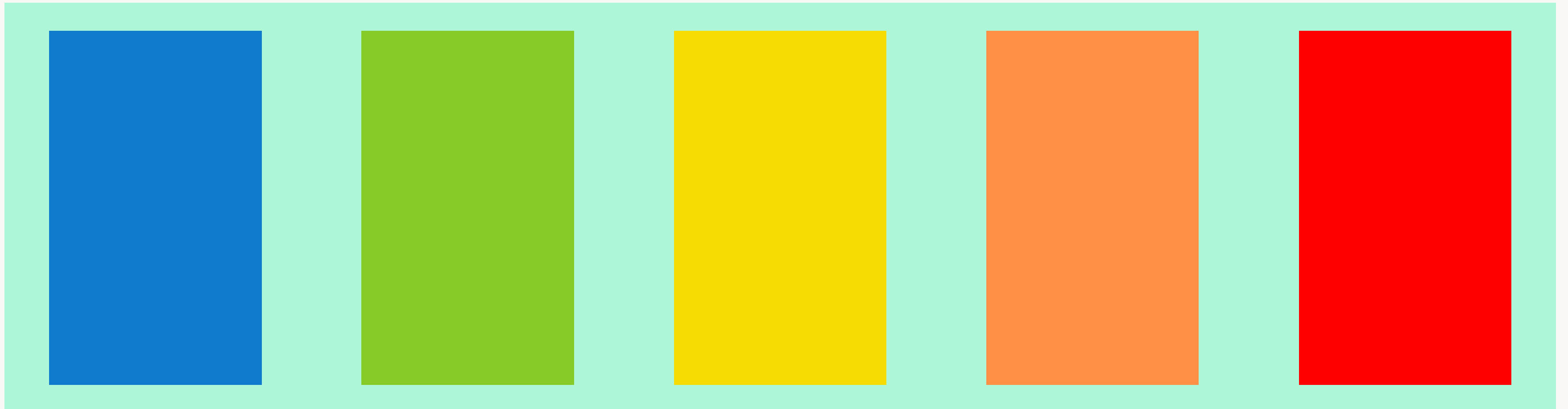
```
align-items: flex-end;
```

ALIGN ITEMS



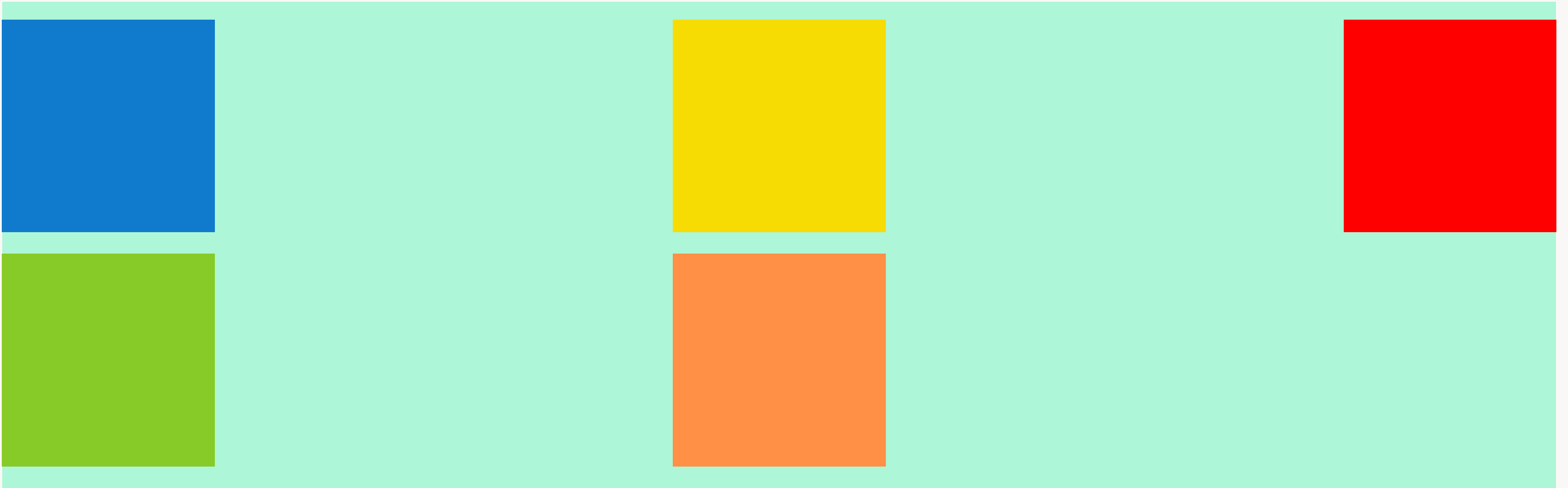
```
align-items: center;
```


ALIGN ITEMS



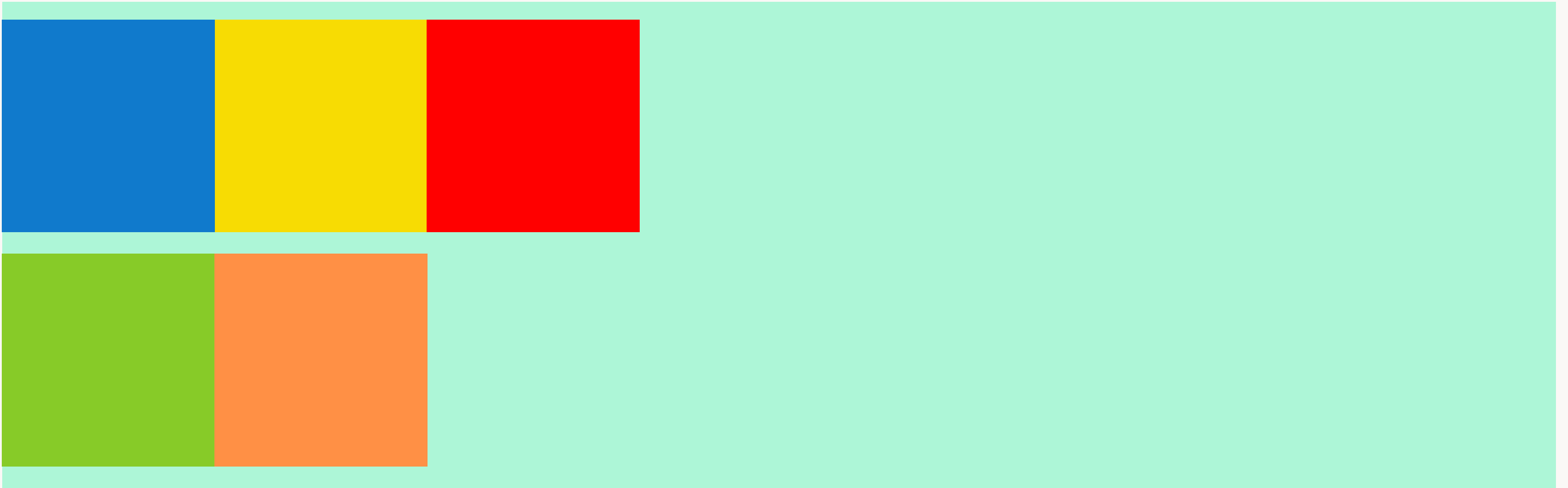
```
align-items: stretch;
```

ALIGN CONTENT



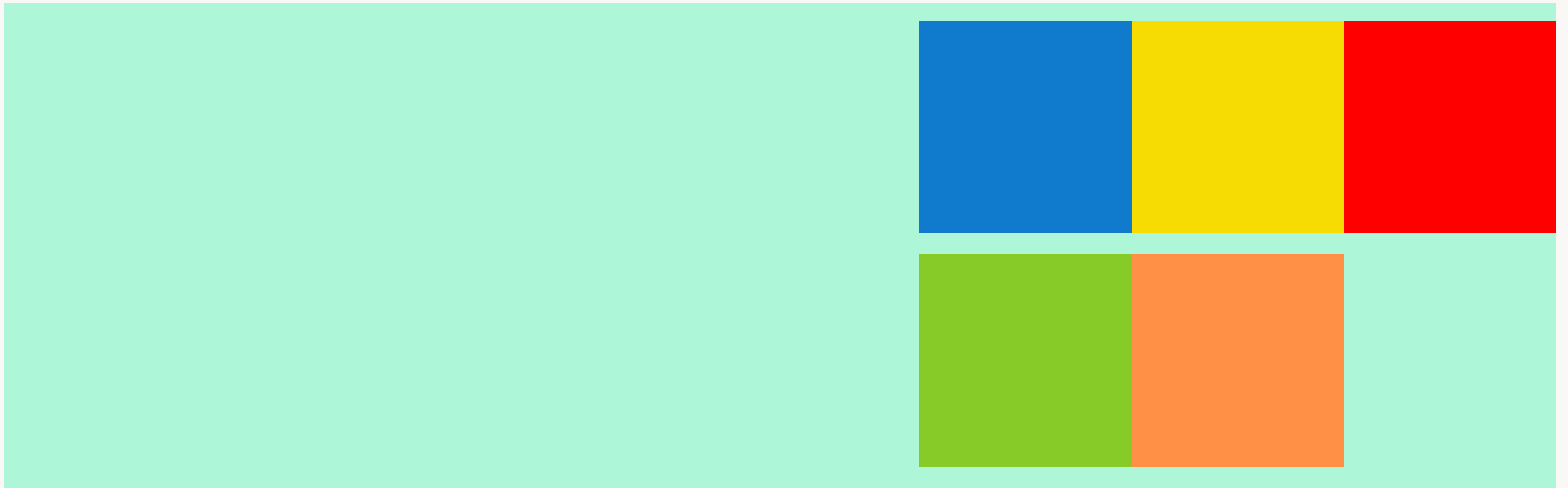
```
align-content: space-between;
```

ALIGN CONTENT



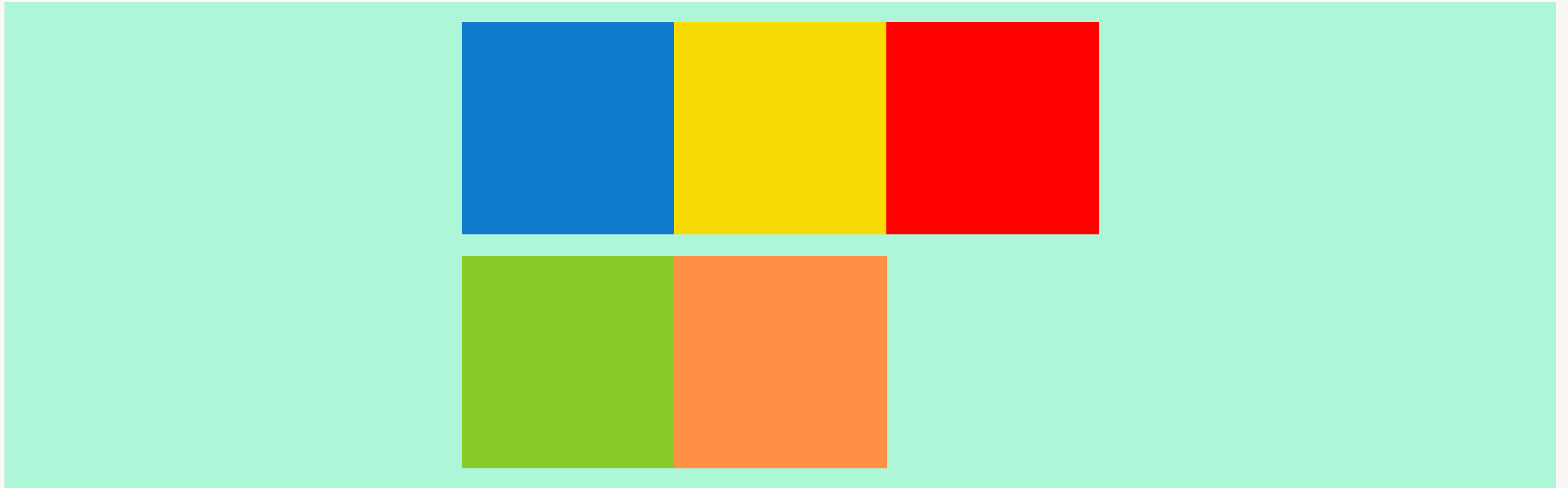
```
align-content: flex-start;
```

ALIGN CONTENT



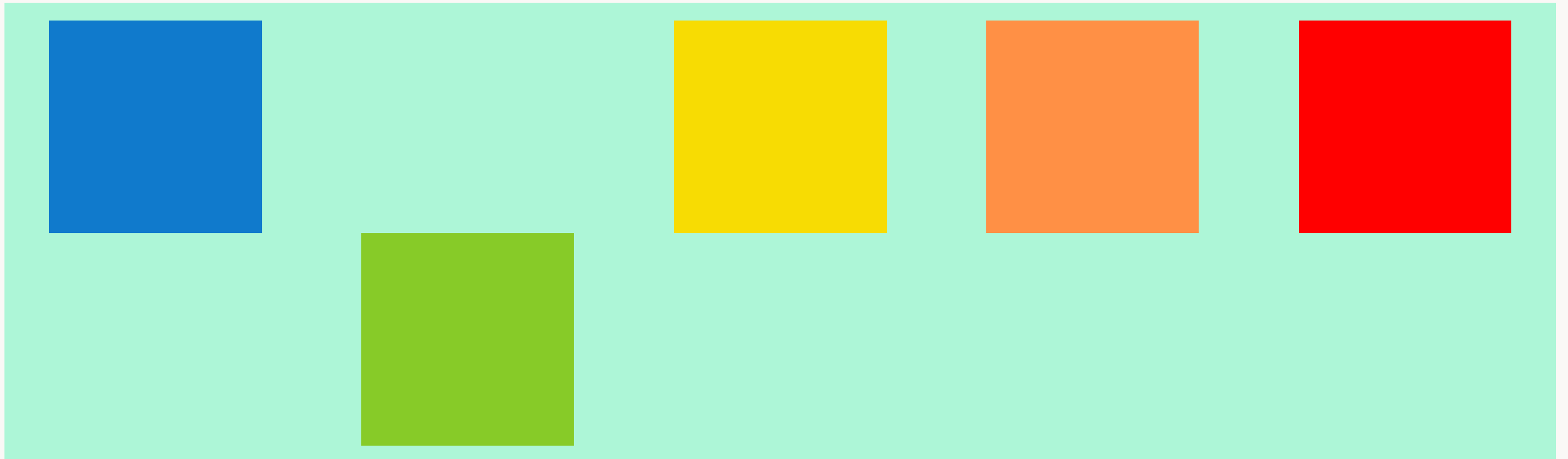
```
align-content: flex-end;
```

ALIGN CONTENT



```
align-content:center;
```

ALIGN SELF



```
align-self: flex-end;
```



FLEX SIZING PROPERTIES

FLEX-BASIS

Defines the initial size of an element before additional space is distributed.

FLEX-GROW

Controls the amount of available space an element should take up. Accepts a unit-less number value.

FLEX-SHRINK

If items are larger than the container, they shrink according to flex-shrink.



RESPONSIVE DESIGN

What it is and why
you should care?



THE PROBLEM

As mobile devices and tablets became widely available, developers had a problem... How do we create websites that look good on all screen sizes?

ONE APPROACH

Early on, it was common to create separate stylesheets for different devices, or even completely different websites for each size.

ENTER RESPONSIVE

These days, we typically create ONE website and stylesheet that is able to repond to different device sizes and features

MEDIA QUERIES

Allow us to modify our styles depending on particular parameters like screen width or device type.





```
@media (max-width: 800px) {  
  .sidebar {  
    display: none;  
  }  
  
  .main {  
    width: 80%;  
  }  
}  
  
@media (min-width: 30em) and (orientation: landscape) {  
  #container {  
    flex-direction: column;  
    justify-content: center;  
  }  
}
```

MEDIA QUERIES