



**FLEXBOX**



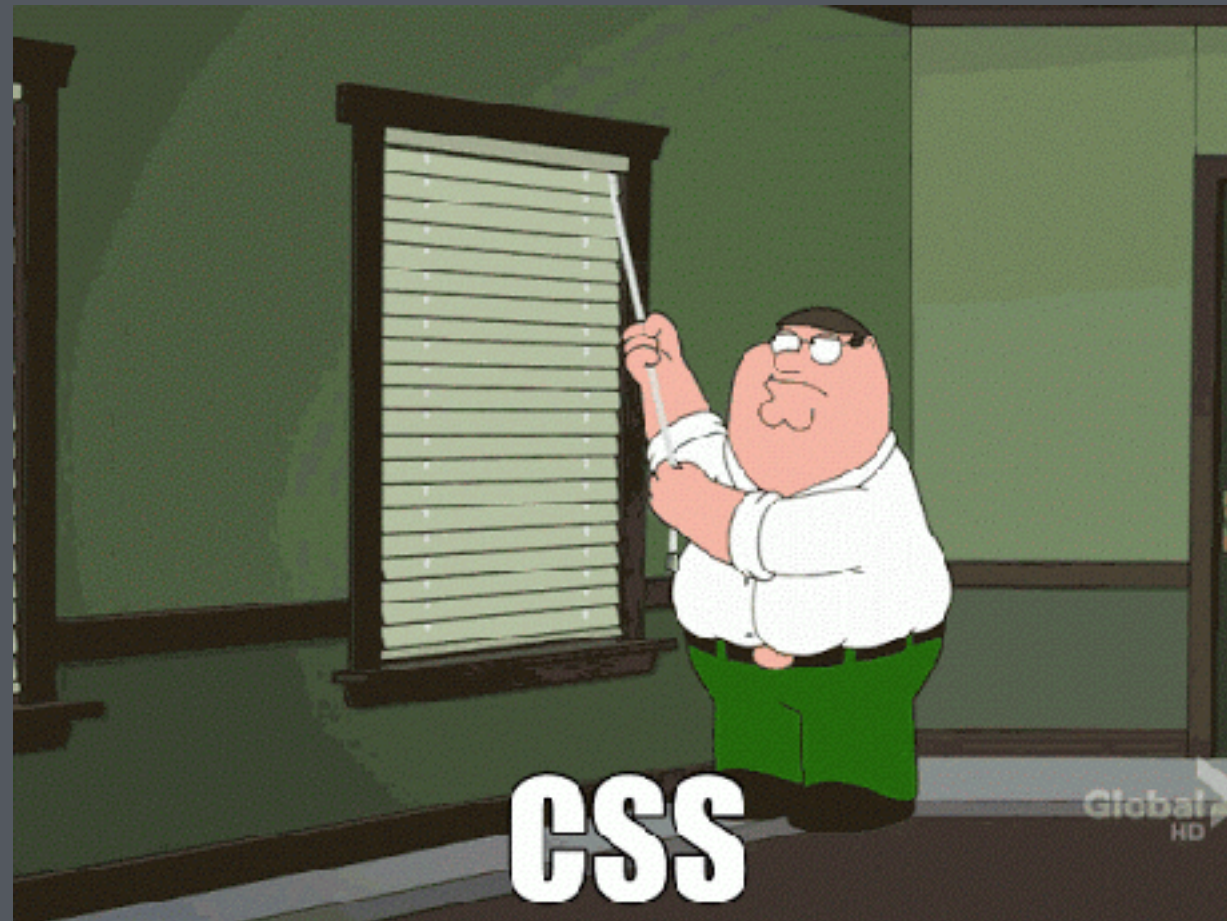
**BUT FIRST...**

# THE BIG REVIEW

Let's see how much you learned...

Complete assignment #1 during  
the first half of class.

# BACKGROUND



CSS layouts sometimes feel like you are fighting against the browser.

**WHERE HAVE YOU FELT  
LIMITED BY LAYOUTS?**

# WHY?

CSS was written a LONG time ago, in a galaxy far far away (called the 1990s).

There was no concept of a multi-device universe or interactive websites. Everything was based around print layouts.



## Pasta 3

Carbs are out of favour with some, but pasta is low in fat and a good source of protein – 100g can contain 25 per cent of daily protein needs – making it a great choice for meals, as well as quick and easy night meals for the family.

## PERFECT PASTA

Bring water in a large saucepan to a rolling boil, add salt, then gradually add pasta. Stir and keep the water boiling fast to keep the pasta moving. Test by biting a piece of pasta. It is done when it is al dente – cooked through but still firm to bite. Before draining, reserve a little of the cooking liquid to use in whatever sauce you are making. Drain pasta using a colander. Do not rinse it – this removes flavour.

## ANGEL HAIR FRITTATA

PREP &amp; COOK TIME 30 MIN

- 100g angel hair pasta
- 1 tablespoon vegetable oil
- 1 small leek (200g), chopped finely
- 2 cloves garlic, crushed
- ¼ cup (20g) finely grated parmesan
- 200g feta, crumbled
- 60g spinach leaves, chopped coarsely
- ¼ cup (120g) sour cream
- ¼ teaspoon ground nutmeg
- 6 eggs, beaten lightly

1. Cook pasta in salted boiling water for 10 minutes. Drain and set aside.  
2. Heat oil in a frying pan over medium heat. Cook leek and garlic for 5 minutes until softened. Add spinach and parmesan and cook for 2 minutes. Remove from heat and set aside.  
3. In a large bowl, whisk eggs with salt and pepper. Add the leek mixture, feta, spinach and parmesan. Mix well.  
4. Heat oil in a frying pan over medium heat. Pour the mixture into the pan and cook for 5 minutes. Turn the mixture over and cook for another 5 minutes. Remove from heat and set aside.

5. Remove cover from pan and stir about 10 minutes. The frittata is done when the top is golden brown and the bottom is cooked. If the frittata is not cooked through, cook for another 5 minutes. Top with a mixed leaf salad, if you like.

NOTE: The best is a frying pan with an ovenproof handle for this recipe. If the handle of your pan is not ovenproof, wrap it in two layers of foil before placing the pan under the grill. The frittata can be eaten hot, warm or at room temperature. It is not suitable to freeze.

## FLOATS

## WHICH PASTA, WITH WHICH SAUCE?

There are no hard and fast rules for matching sauces with pasta shapes, but a simple rule of thumb is the longer the pasta, the thinner the sauce; the shorter the pasta, the thicker or chunkier the sauce.

That why's we have the float-based system - it comes from print design where you "float" images in a sea of words - like in a magazine.

# ALONG COMES FLEXBOX

CSS3 ushered in a new approach to improving CSS incrementally. Over about 3-4 years, flexbox finally settled out as the preferred method and has finally seen wide adoption as IE has declined in use.



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# HOW TO FLEXBOX

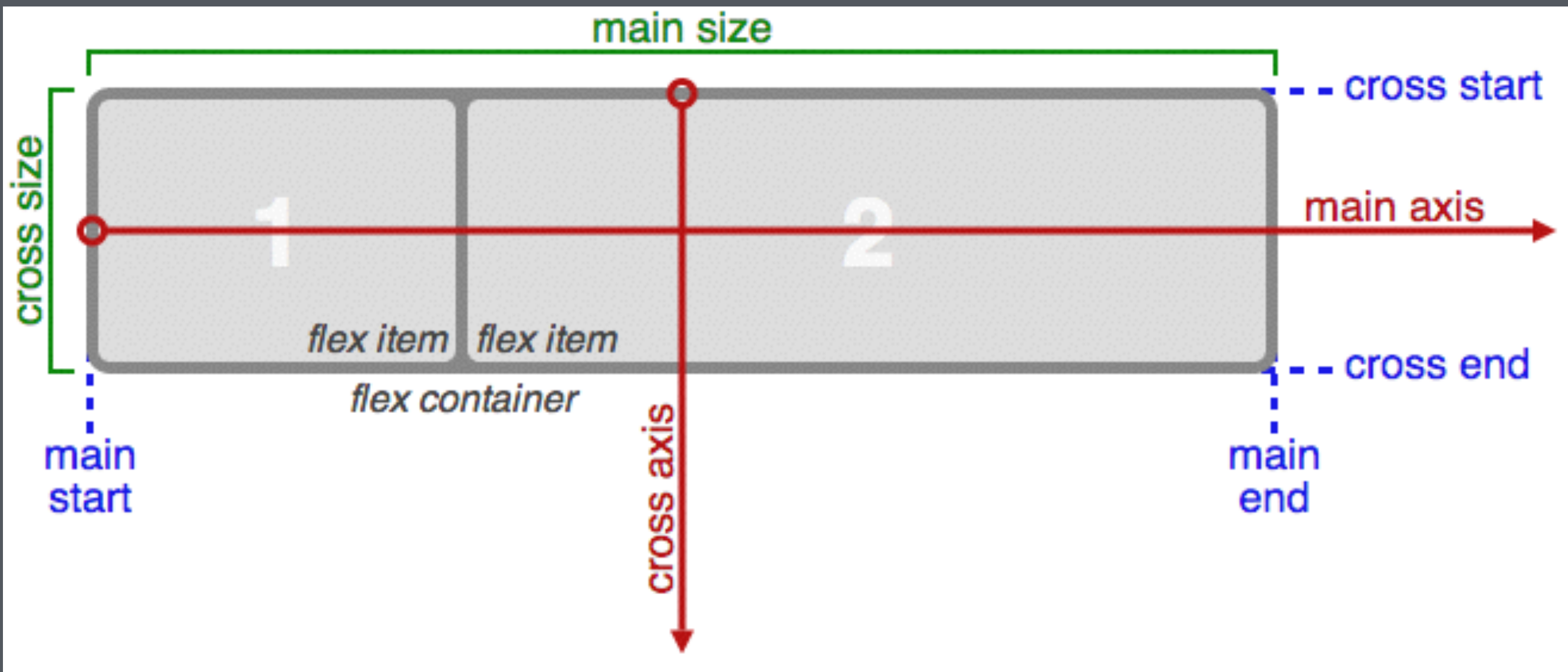
Easy to start, harder to use well

```
display: flex;
```

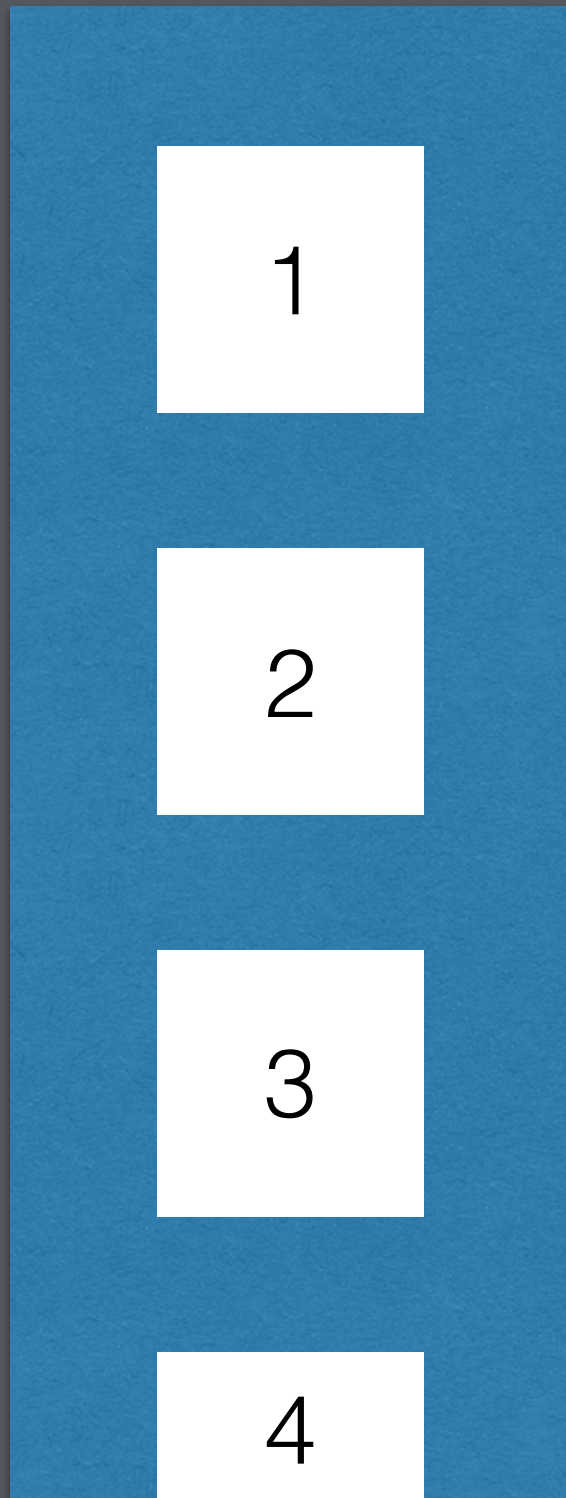


# HOW TO FLEXBOX

## Multi-axis alignment method



# FLEX-DIRECTION

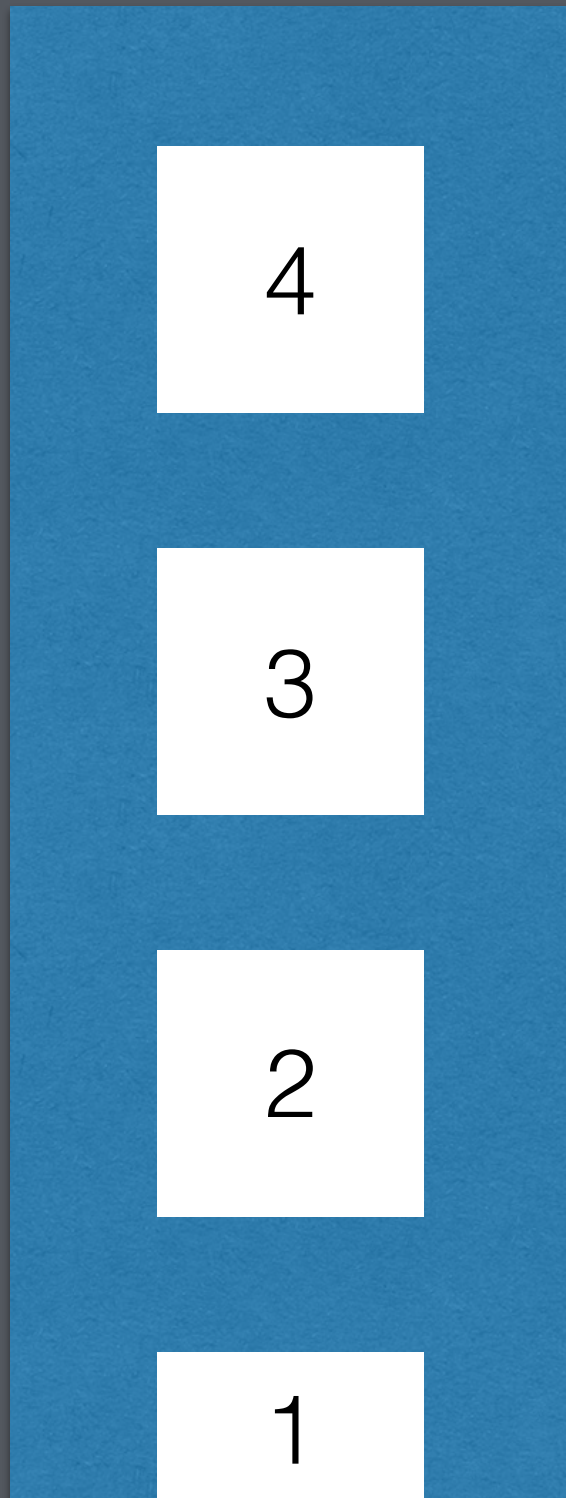


Think about orientation -  
flexbox layouts are  
inherently vertical or  
horizontal

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



# FLEX-DIRECTION



You can easily flip the display order without reordering your HTML!

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

# FLEX-DIRECTION

1

2

3

4

5

You can also do layouts in a row.

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



# FLEX-DIRECTION

5

4

3

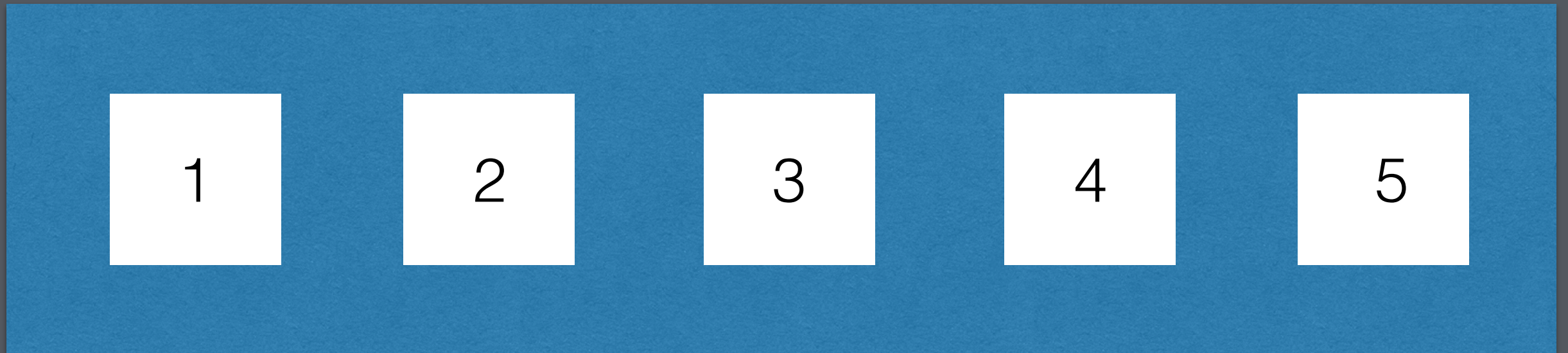
2

1

You can also flip rows - this is very advantageous for right-to-left languages like Arabic.

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

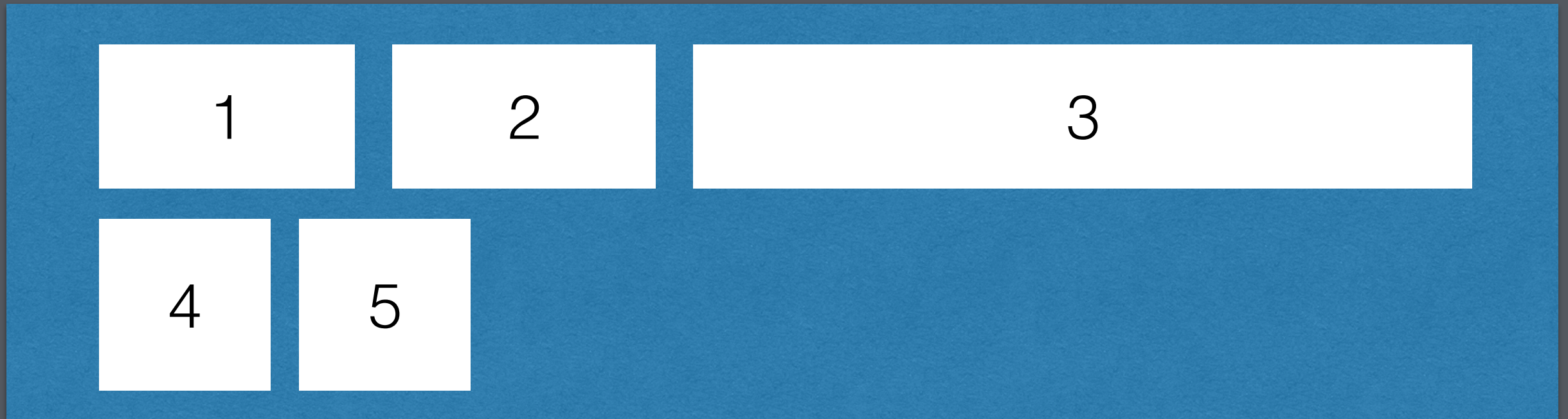
# FLEX-WRAP



By default, all boxes are stuffed into one row.

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

# FLEX-WRAP

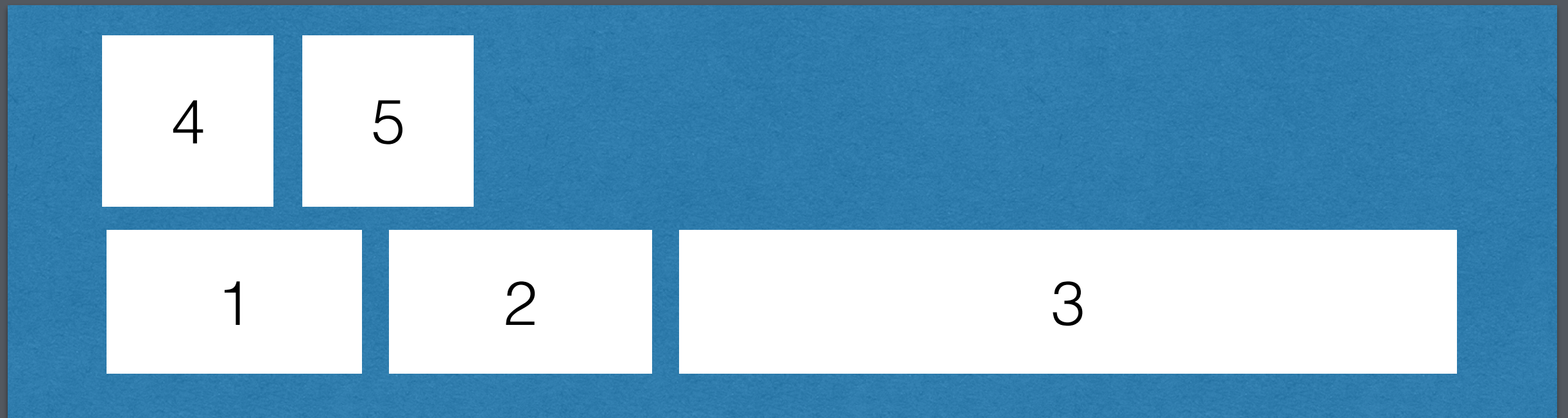


But you can make them  
pop-out into additional rows  
as needed.

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



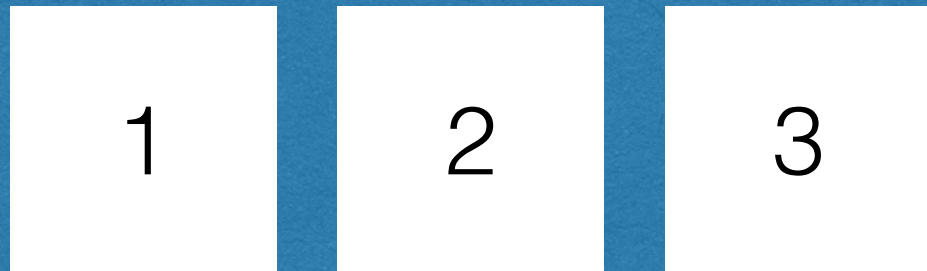
# FLEX-WRAP



They can display right to left as well and bottom-to-top (I find this very confusing personally and don't use it).

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

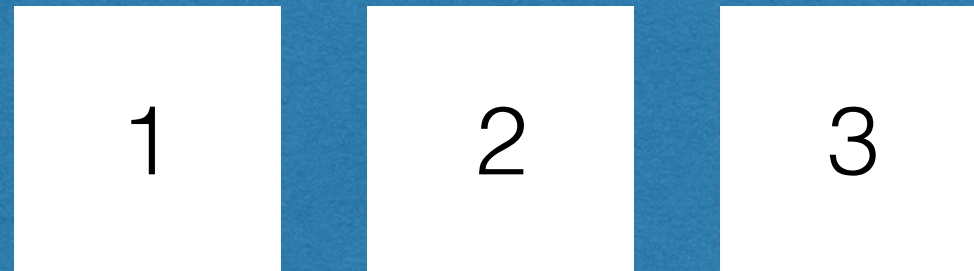
# JUSTIFY-CONTENT



Controls how boxes space  
in flexbox rows/columns.

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

# JUSTIFY-CONTENT



Centering is easy - note,  
auto margins don't work in  
flex land.

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



# JUSTIFY-CONTENT



1

2

3

Push everything right,  
similar to `text-align: right;`  
but for layouts!

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

# JUSTIFY-CONTENT

1

2

3

Pushes stuff as far apart as possible.

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

# JUSTIFY-CONTENT

1

2

3

Centers with respect to total row/column, equal spacing between each item.

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



# ALIGN-CONTENT

1

2

3

Centers with respect to total row/column, equal spacing between each item.

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

# CODE ALONG

Assignment #1

# NEXT TIME

You tell me!

Keep working on Final Projects!