### Aesthetics for ggvis

As with all graphics there are a number of aesthetics we can set

- stroke
- ▶ fill
- size
- opacity

# Changing Aesthetics based on variables

- In ggvis we map a variable to a property using =
- We have to remember to use the "∼" with all variable names
- fill =  $\sim$  Line would set the fill based on the Line variable

```
tubeData %>%
ggvis(x = ~Month, y = ~Excess,
     fill = ~Type) %>%
     layer_points()
```

## Setting property values

- ▶ When we set a property based on a value we use ":="
- ▶ fill := "red" would set the fill to red

```
tubeData %>%
ggvis(x = ~Month, y = ~Excess,
     fill := "orange",
     opacity := 0.6) %>%
     layer_points()
```

#### Exercise

### **Exercise**

- Create a plot of mpg against wt using the mtcars data
- Update the plot to colour by the cylinder variable, ensure that the points are coloured by distinct colours rather than on a scale
- Update the plotting symbol to be triangles.