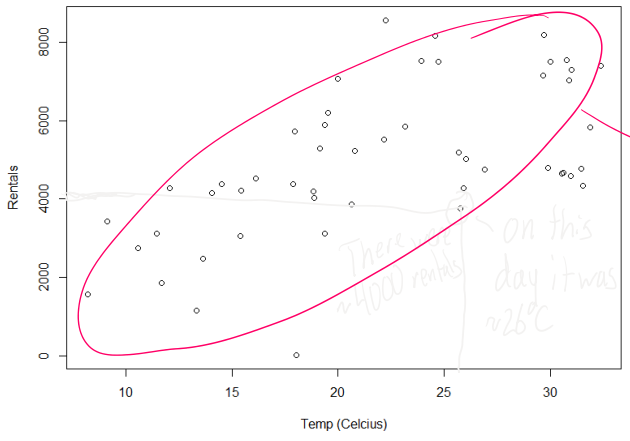
Visualizing Numerical Data - Scatterplots

What if we want to explore the relationship between two numerical variables.

Two variables are correlated if changes in one variable correspond to changes in the other.

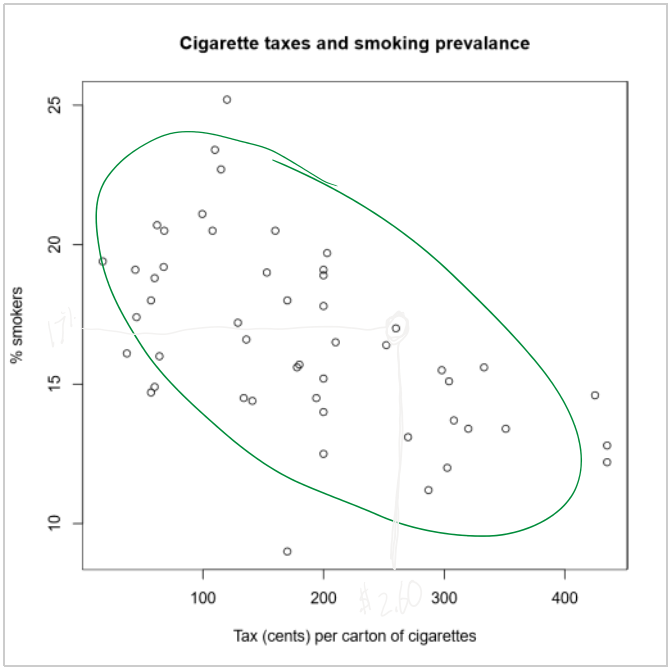


- Bike share rentals are correlated with temperature.

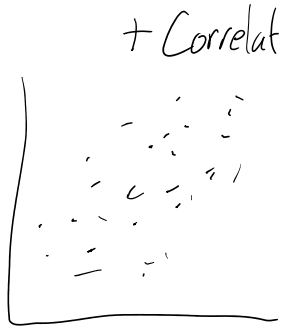
Higher temps correspond to higher bike rentals.

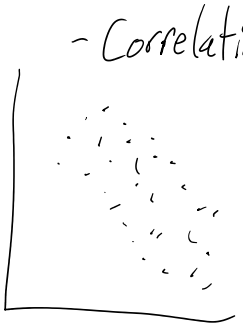
These two variables are positively correlated

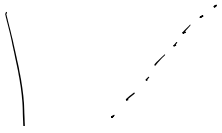
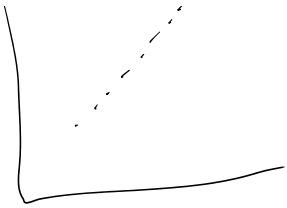
Data { Day: 1/24, 2/14, 3/12, 4/21, 5/5, ...
Temp: -5°C 5C 15C 20C 23C
Rentals: 1812 2424 3614 3248 4, ...



The relationship between % of smokers and the tax rate on cigarettes are negatively correlated.





Correlation near 0

Correlation near -1 or +1