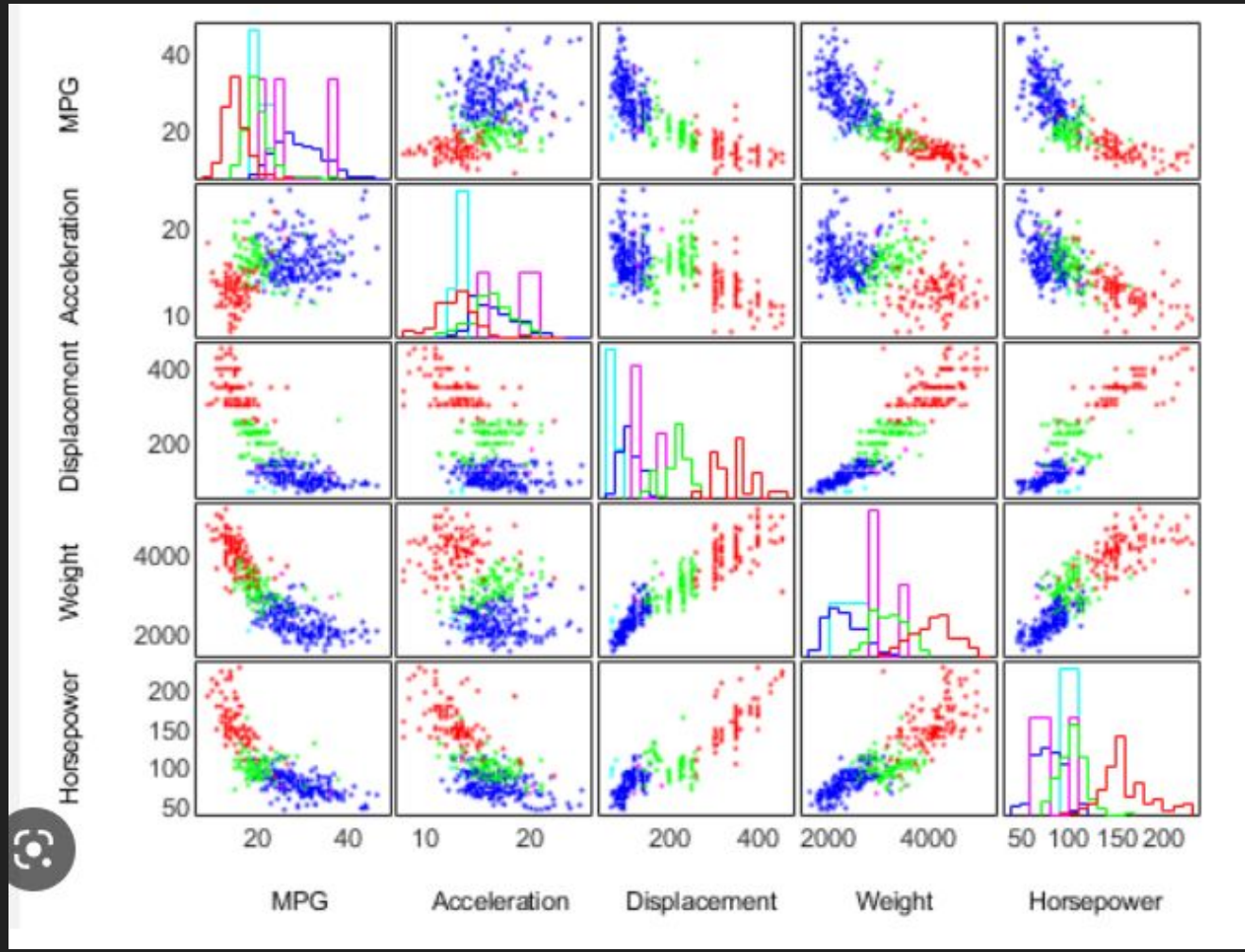
Scatter Plot

lesson 6

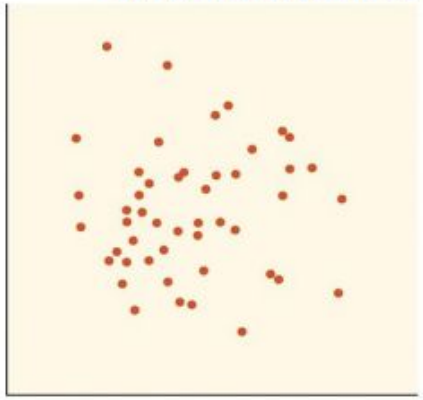
Multivariate Data



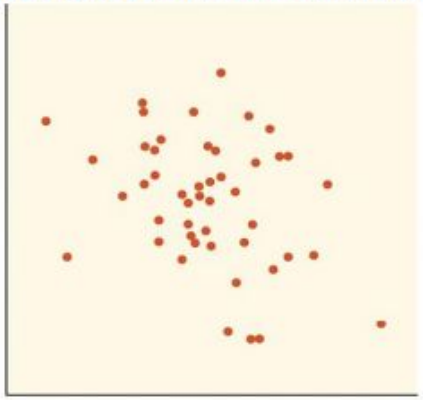
Real Estate Data Set

	A	B	C	D	E	F
1	No	transaction date	house age	distance to the n	price per square foot	
2	1	2012.917	32	594.15174	758	
3	2	2012.917	19.5	2146.1629	844	
4	3	2013.583	13.3	3933.8915	946	
5	4	2013.5	13.3	3933.8915	1096	
6	5	2012.833	5	2733.9788	862	
7	6	2012.667	7.1	15225.21	642	
8	7	2012.667	34.5	4364.3117	806	
9	8	2013.417	20.3	2013.2175	934	
10	9	2013.5	31.7	38584.266	376	
11	10	2013.417	17.9	12482.26	442	
12	11	2013.083	34.8	2836.4938	828	
13	12	2013.333	6.3	633.19242	1162	
14	13	2012.917	13	3445.6191	786	
15	14	2012.667	20.4	17287.515	476	
16	15	2013.5	13.2	8153.866	686	
17	16	2013.583	35.7	4054.4581	1010	
18	17	2013.25	0	2050.9846	1402	

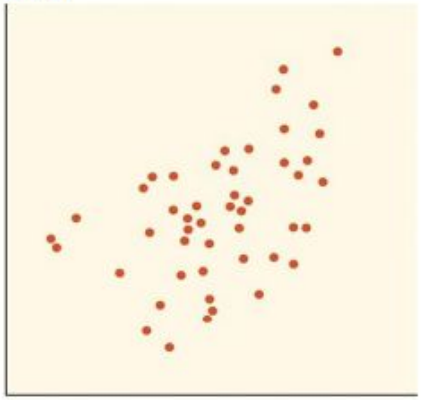
different degrees of strength (for different values of r).



Correlation $r = 0$



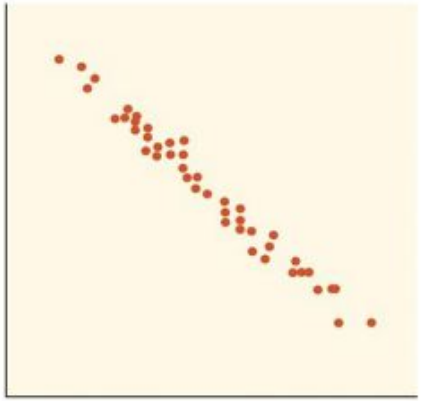
Correlation $r = -0.3$



Correlation $r = 0.5$

Correlation $r = -0.7$

Correlation $r = 0.9$



Correlation $r = -0.99$

padlet.com

:Padlet

Log in

Home

Product

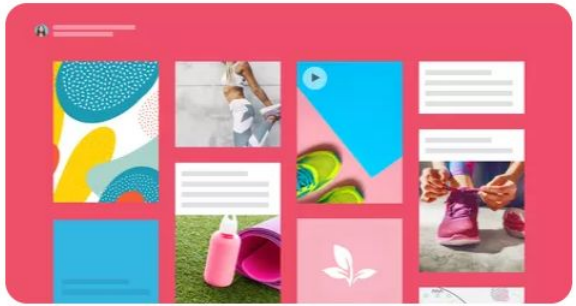
Memberships

It's a beautiful day.

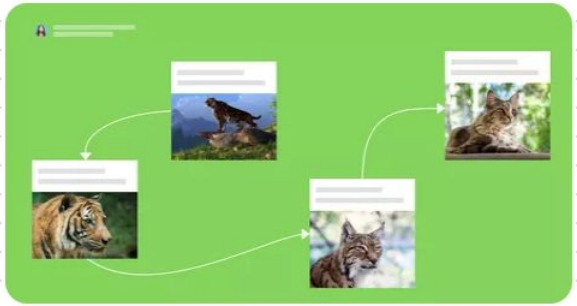
Make something beautiful.

Sign up for free

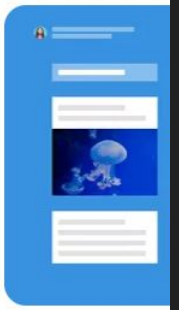
Install windows app



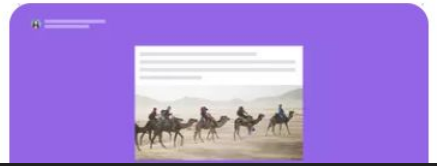
Wall

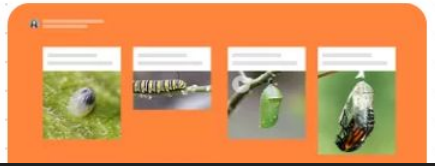


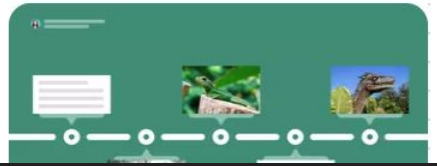
Canvas



Shelf







What relationships between variables do you notice?

```
5
6  }
7
8  function setup() {
9    createCanvas(450, 450);
10   background(220);
11   let numRows = data.getRowCount();
12   let age = data.getColumn(2)
13   let price = data.getColumn(4)
14   let distance = data.getColumn(3)
15   console.log(age)
16   textSize(28)
17   text("Age and Price of Homes",50,50)
18
19   strokeWeight(1)
20   line(98,98,98,350)
21   line(98,350,400,350)
22   textSize(14)
23   text("Price of Home/ sqft",200,400)
```

Console Clear

▶ (414) ["32", "19.5", "13.3", "13.3", "5", "7.1", "34.5", "20.3", "31.7", "17.9", …]