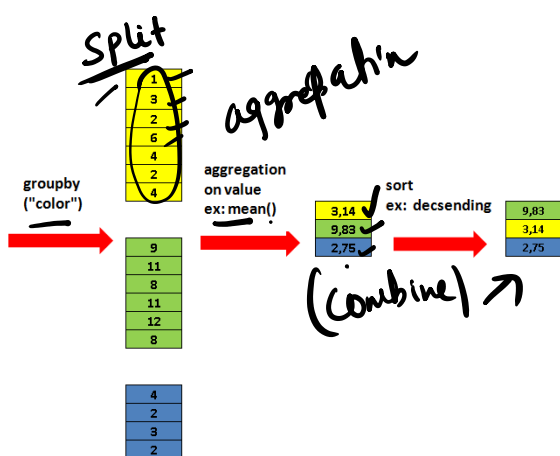


Color	Value
Yellow	10
Green	9
Green	11
Yellow	3
Yellow	2
Green	6
Green	8
Blue	4
Green	4
Yellow	11
Yellow	2
Blue	2
Blue	4
Blue	3
Blue	2
Green	12
Green	8

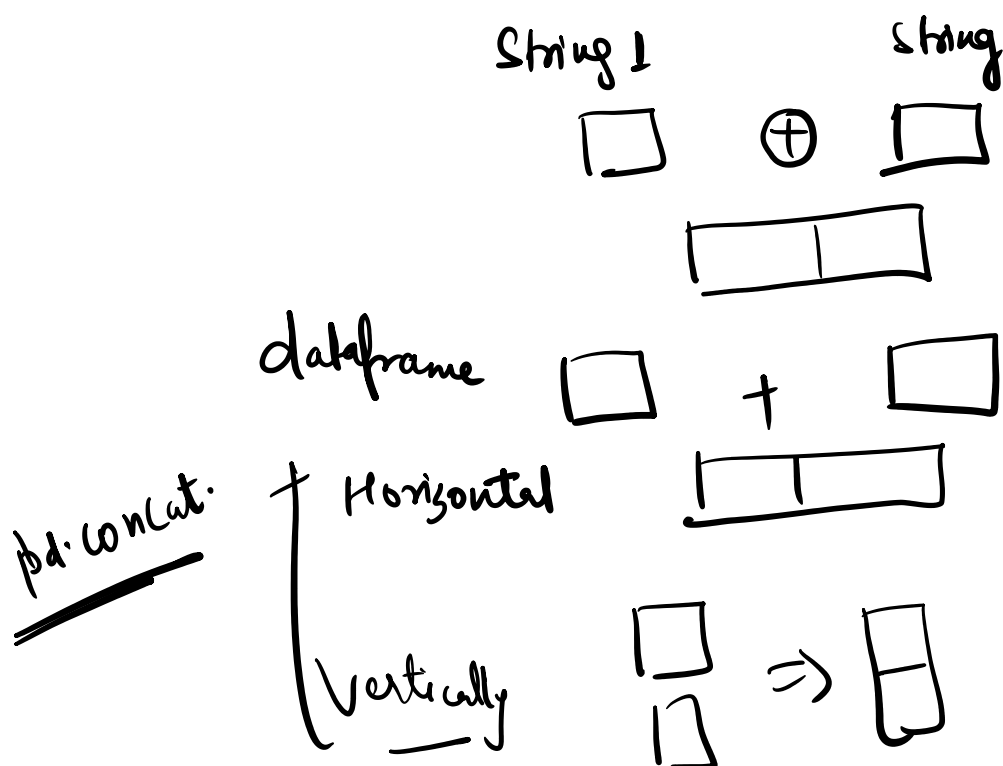


group by color.

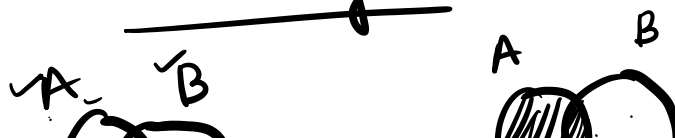
Aggregation

↓ (mean, min, max)

Combine

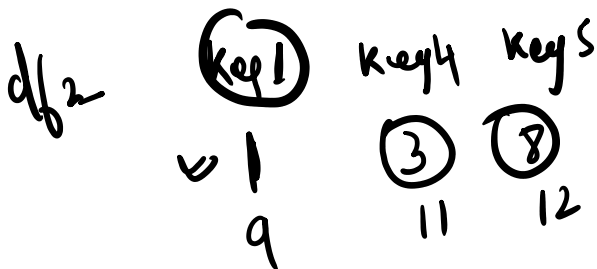
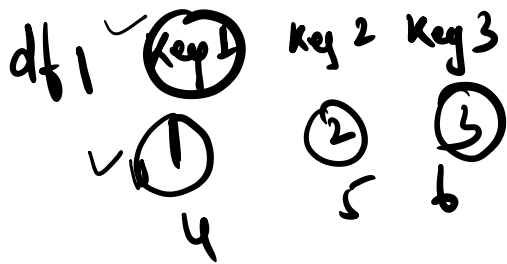


Venn diagram

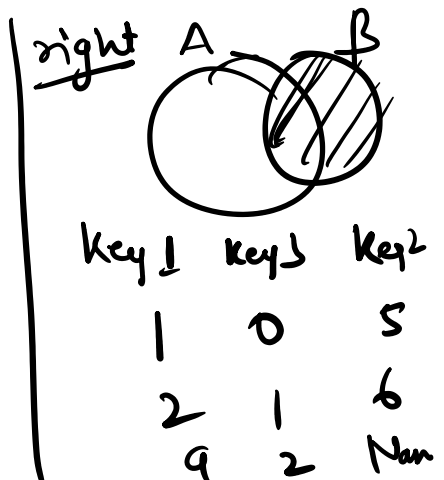
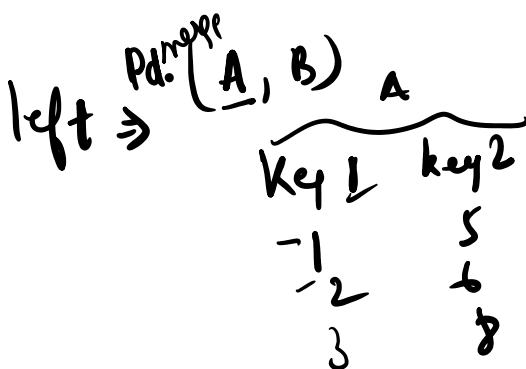
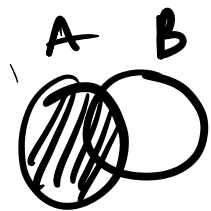
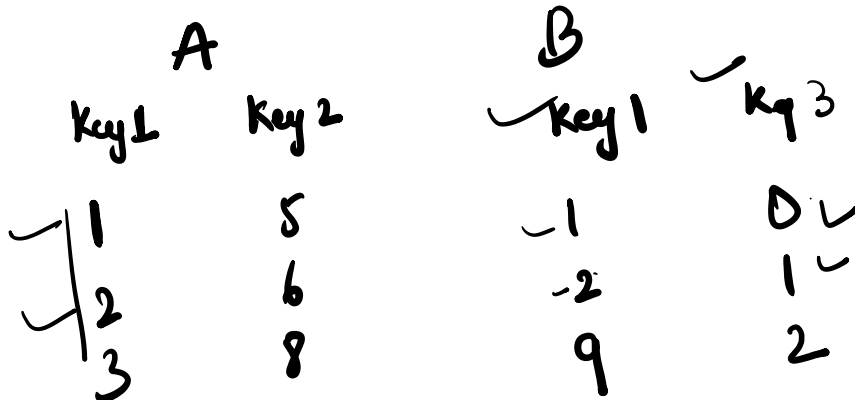
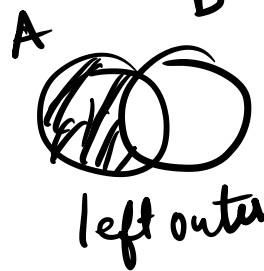
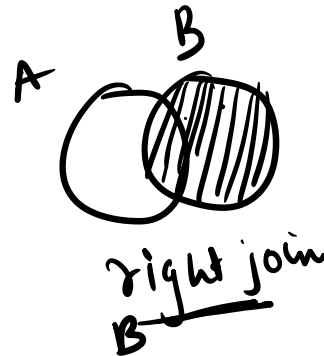
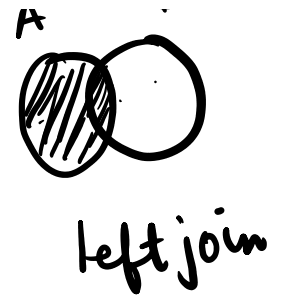
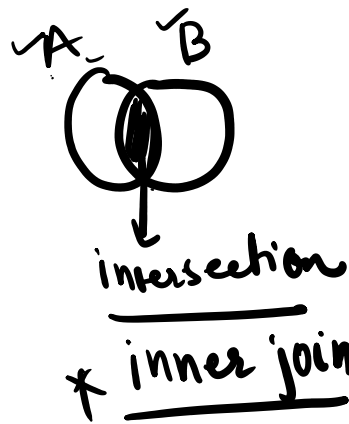


inner
left

inner
left
right



df1.merge(df2, on='Key 1', how='inner')

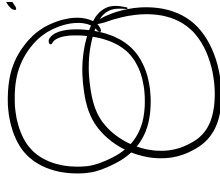


outer merge



all the keys of both the

Windowing



all the keys of both the datasets

A

key 1	key 2
1	2
3	4
5	4

B

key 1	key 2	key 3
7	8	
3	9	
5	10	

key 1	key 2	key 3
1	2	Nan
3	4	9
5	4	10
7	Nan	8

Window=3

1	Nan
2	Nan
3	$\frac{3+2+1}{3}$
4	$\frac{2+3+4}{3}$
5	$\frac{3+4+5}{3}$
6	
7	
8	
9	

Window=2

1	Nan
2	$\frac{1+2}{2} = 1.5$
3	2.5
4	3.5
5	4.5
6	5.5
7	6.5
8	
9	

Window=1

1	
2	
3	
4	
5	
6	
7	
8	
9	