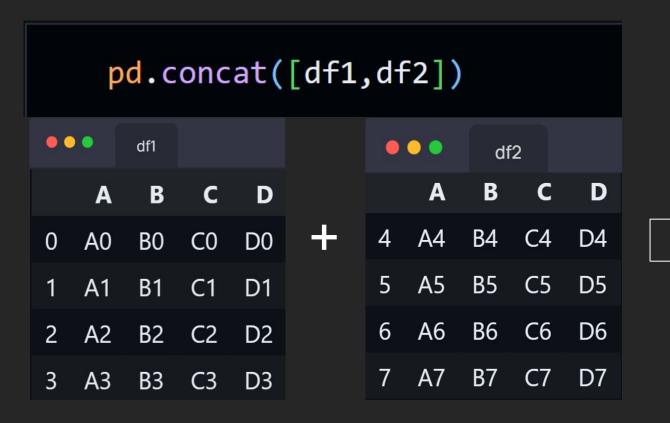
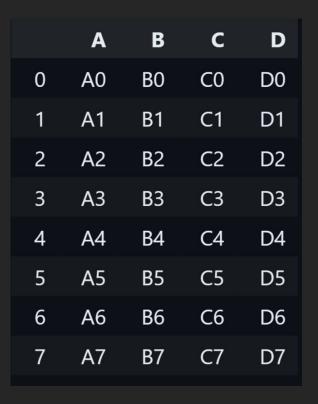
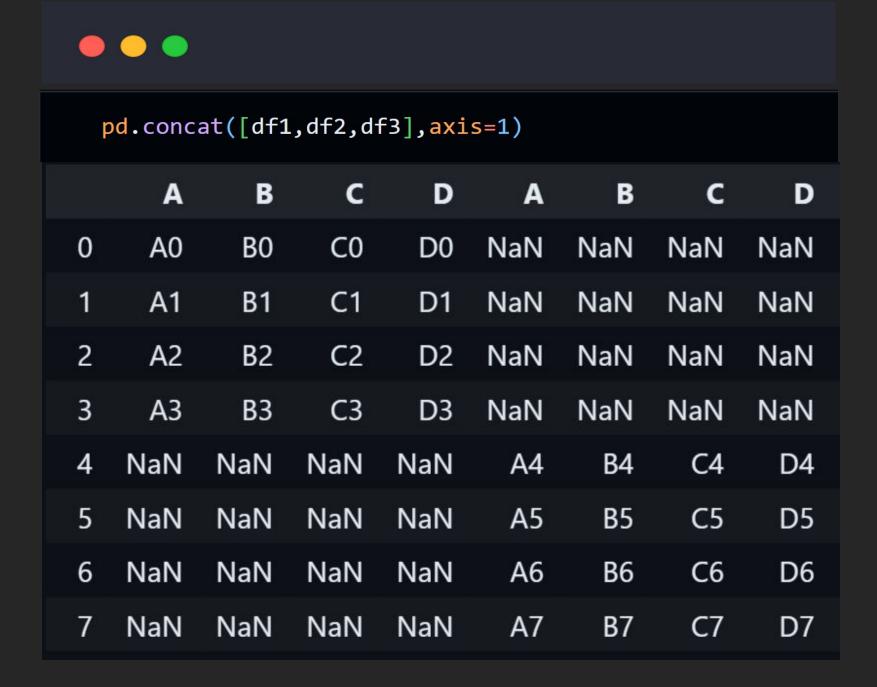
Concatenation

Use pd. concat() for Combines DataFrames along rows or columns.



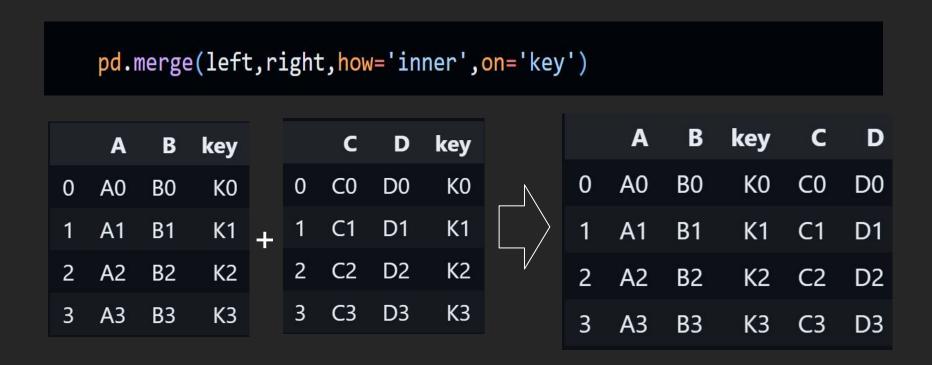


- Join Row wise with axis=1
- Empty values are filled with NaN



Merging

The **merge** function allows you to merge DataFrames together using logic similar to merging SQL Tables



Default merge type is inner, but how can be set to left, right, outer, etc.

on can be list of keys as well

pd.merge(left, right, on=['key1', 'key2'])

	A	В	key1	key2	C	D
0	A0	ВО	K0	K0	C0	D0
1	A2	B2	K1	K0	C1	D1
2	A2	B2	K1	KO	C2	D2

Joining

Convenient when combining DataFrames on index rather than column keys.

.join uses same logic as merge. But join is a methos

```
left.join(right, how='inner')
```

	A	В	C	D
K0	A0	В0	C0	D0
K1	A1	B1	NaN	NaN
K2	A2	B2	C2	D2

Summary Table

Method	Function	Description	Best For
Concatenation	pd.concat()	Stacks DataFrames along rows or columns	Appending data
Merging	pd.merge()	SQL-like joins based on columns (keys)	Row alignment on common columns
Joining	df1.join(df2)	Joins based on DataFrame indexes	Index alignment without columns