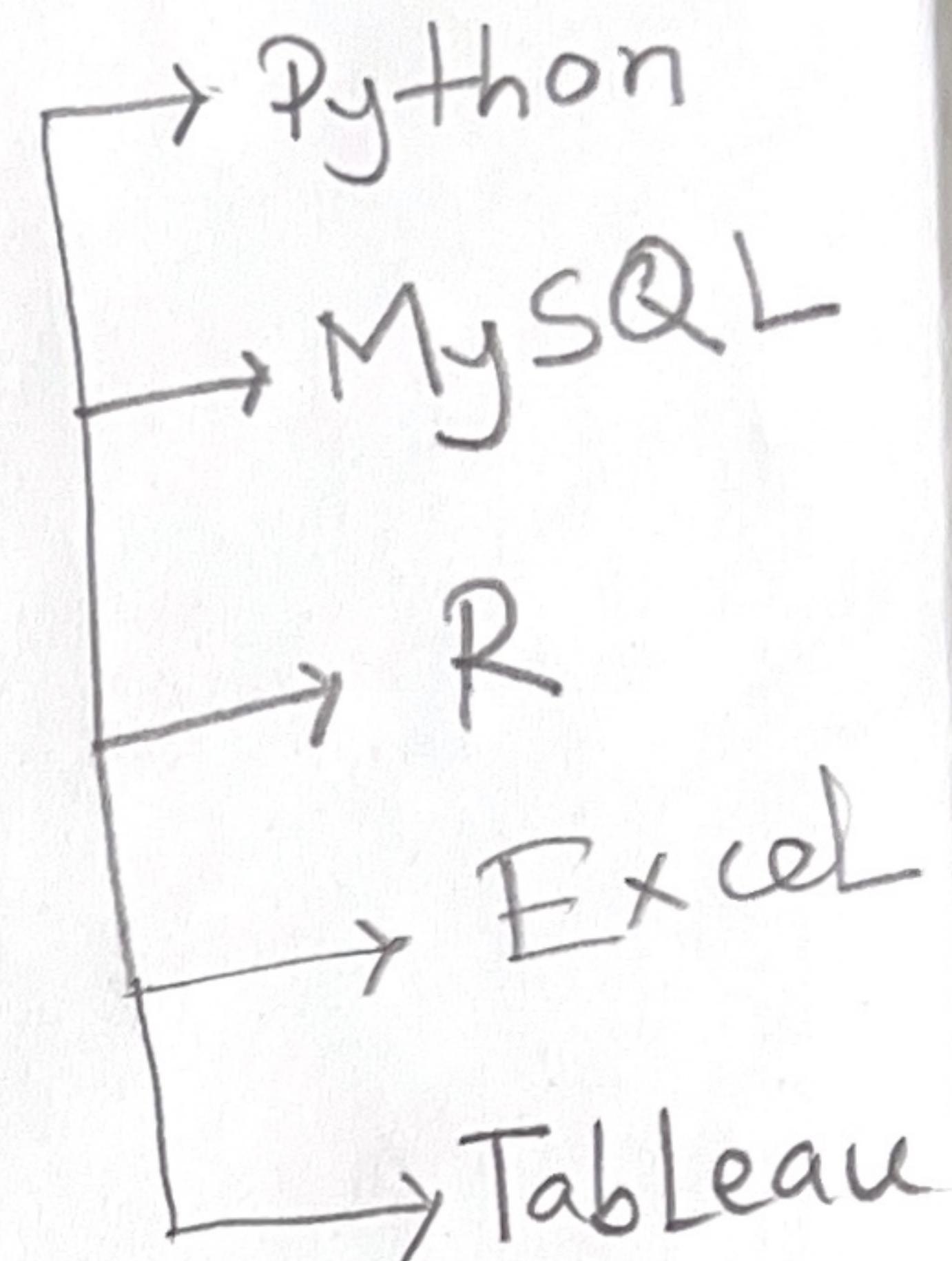


Assignment

- Types of joining.
- Perform different types of join in



Types of joining

1. Inner join

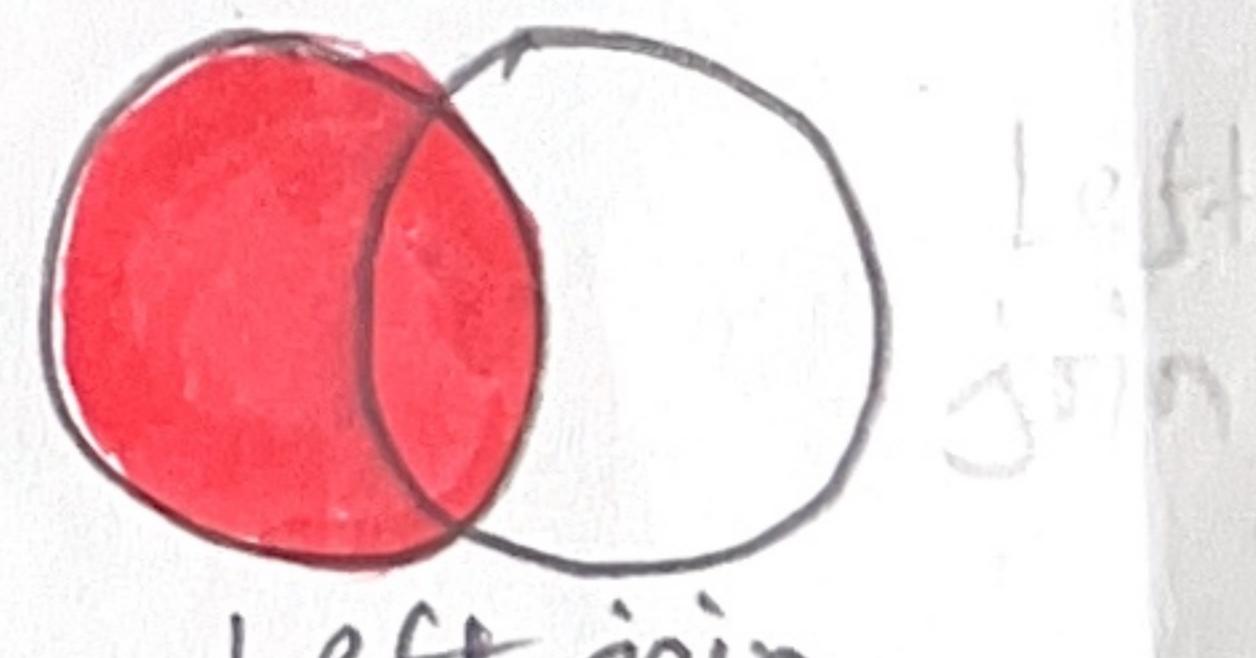
Returns only the rows that have matching values in both sides.



inner join

2. Left join

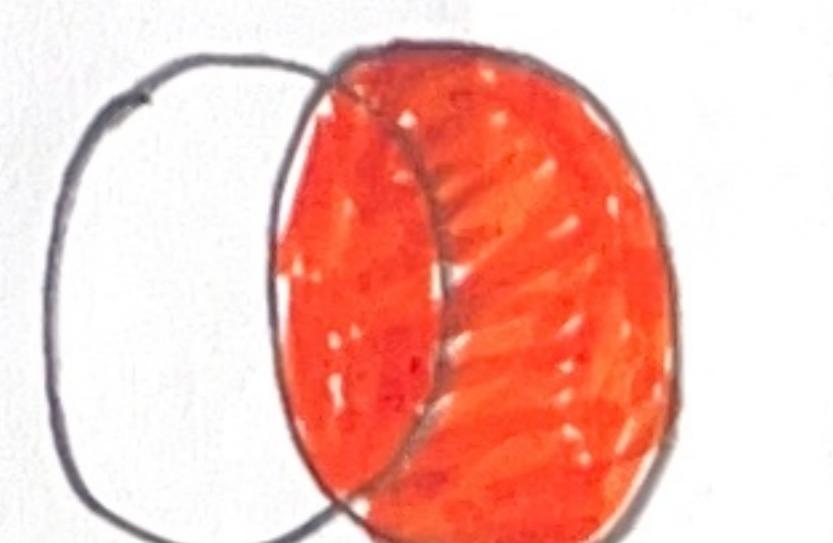
Returns all rows from the left table and matched rows from the right table.



Left join

3. Right join

Returns all rows from the right table and the matched rows from the left table.



Right join

4. Full join

Returns all rows when there is a match in either the left or right table.



Full join

It

Python

```
import pandas as pd
```

```
Patient = pd.read_excel(r"c:\analytics\data\Patient.xlsx")
```

Patient

	ID	Name	Age
0	1	Mike	22
1	2	Bili	35
2	3	Abram	40
3	4	Parkers	25

```
DetailnP = pd.read_excel(r"c:\analytics\data\DetailnP.xlsx")
```

DetailnP

	ID	city	Gender
0	1	NY	M
1	2	KY	F
2	5	MD	M
3	6	VA	F

inner join:

```
pd.merge(Patient, DetailnP, on="ID", how="inner")
```

Left join:

```
pd.merge(Patient, DetailnP, on="ID", how="Left")
```

Right join

```
pd.merge(Patient, DetailnP, on="ID", how="Right")
```

Outer join

```
pd.merge(Patient, DetailnP, on="ID", how="Outer")
```

cross join in Python

```
Patient.assign(key=1).merge(DetailP.assign(key=1))
```

joining in R

```
(df1<-data.frame(ID=1:2,x1="a1", "a2"))
```

```
(df2<-data.frame(ID=2:3,x2="b1", "b2"))
```

Inner-join (df1, df2, by = "ID")

Left-join (df1, df2, by = "ID")

Right-join (df1, df2, by = "ID")

full-join (df1, df2, by = "ID")

Semi-join (df1, df2, by = "ID")

anti-join (df1, df2, by = "ID")

joining in SQL

create TABLE patient (patient-ID INT primary key,

name varchar(25), age INT);

Insert into patient (patient-ID, name, age)

values (1, "Nick", 30), (2, "Dina", 46), (3, "Dila", 50),
(4, "Rony", 35);

create TABLE Record (patient-ID INT primary key,

bloodgroup varchar(50));

Insert into Record (patient-ID, bloodgroup)

values (1, "A+"), (3, "B+"), (4, "O-");

#) Inner join: Select * from patient

Inner join Record

on Patient.patient-ID = Record.patient-ID

Left join: select * from patient

Left join Record

on Patient.patient-ID = Record.patient-ID

Right join: Select * from Patient

Right join Record

on Patient.patient-ID = Record.patient-ID

FULL join (SQL)

Select * from Patient

Left join Record

on Patient.patient-ID = Record.patient-ID

Union

Select * from Patient

Right join Record

On Patient.patient-ID = Record.patient-ID

Tableau (joining)

1. Connect to your data sources:

In Tableau, connect to your first data source and drag it's table onto the canvas.

2. Drag the second table:

Drag and position it next to the first table and release.

3. Configure the join:

- set join clauses
- choose join types:

Inner join

Left join

Right join

Full outer join

Finish and analyze % Once configured, the tables will be joined, we can use fields from both tables for analysis,

joining in Excel

Left table

Student ID	name	age
1	Suroor	25
2	Mandal	23
3	Bej.	19
4	Di	23
5	Jkg	25

Right table

Student ID	dept.	Score
1	English	4.5
2	BBA	3.6
3	IT	4.3
4	CSE	4.7
5	EEE	4.6

I am joining these two table by VLOOKUP formula
Each column will be in one table.
Below is my formula:

name join = VLOOKUP(J6, \$A\$4:\$C\$8, 2, FALSE)

dept. join = VLOOKUP(J6, \$F\$4:\$H\$8, 2, FALSE)

score join = VLOOKUP(J6, \$F\$4:\$H\$8, 3, FALSE)

age join = VLOOKUP(J6, \$A\$4:\$C\$8, 3, FALSE)

Thank YOU 