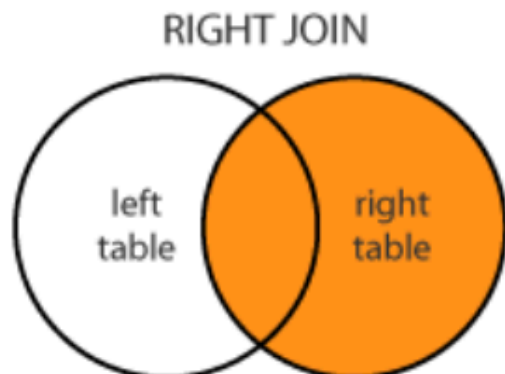
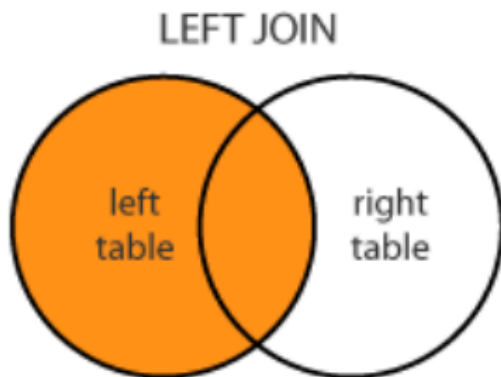
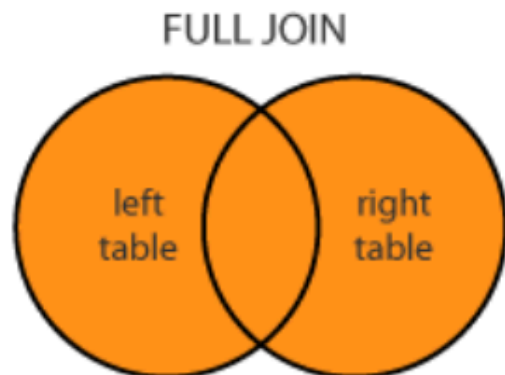
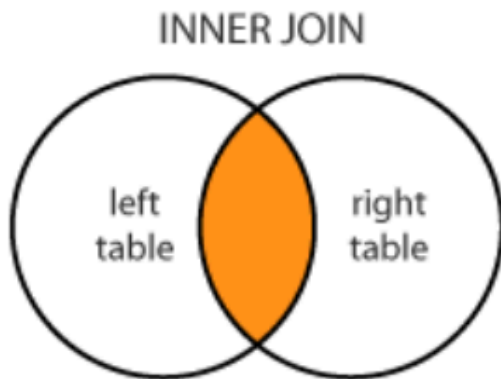


# L3 Aggregation

---

recap:



function useful:

Count sum ave max min

```
SELECT COUNT(*) FROM AnimeVideoViews ...  
SELECT SUM(cost) FROM TeaReceipts ...  
SELECT AVG(price) FROM CarDealers ...  
SELECT MAX (score) FROM Donations ...  
SELECT MIN(price) FROM YogurtStores ...
```

Group:

```
SELECT Job, MAX(Salary)
FROM Payroll
GROUP BY Job
'''GROUP BY Job, Name'''
```

UserID	Name	Job	Salary
123	Jack	TA	50000
345	Allison	TA	60000
567	Magda	Prof	90000
789	Dan	Prof	100000

Job	MAX(Salary)
TA	60000
Prof	100000

## with having

```
SELECT Job, MAX(Salary)
FROM Payroll
GROUP BY Job
HAVING MIN(Salary) > 80000
```

caefull using the uesid to aovid the same name problem

## different with the where and having

在查询过程中聚合语句(sum,min,max,avg,count)要比having子句优先执行。而where子句在查询过程中执行优先级高于聚合语句。