



SQL

The JOIN family of operators

SQL: The JOIN family of operators

```
Select  A1, A2, ..., An  
From    R1, R2, ..., Rm  
Where   condition
```

Explicit Join of tables

Inner Join On *condition*

Natural Join

Inner Join Using(*attrs*)

Left | Right | Full Outer Join

⋈_θ ← *condition*

⋈

⋈_⋈

⋈_⋈

SQL: The JOIN family of operators

```
Select   $A_1, A_2, \dots, A_n$   
From     $R_1, R_2, \dots, R_m$   
Where   condition
```

Explicit **Join** of tables

Demo: simple college admissions database

College(cName, state, enrollment)

Student(sID, sName, GPA, sizeHS)

Apply(sID, cName, major, decision)