

SQL

Aggregation

SQL: Aggregation

Select $A_1, A_2, ..., A_n \leftarrow$ From $R_1, R_2, ..., R_m$ Where condition

"Aggregation" functions over values in multiple rows: min, max, sum, avg, count

SQL: Aggregation

```
Select A_1, A_2, ..., A_n

From R_1, R_2, ..., R_m

Where condition

Group By columns

Having condition

Maggregation functions over values in multiple rows:

min, max, sum, avg, count

New clauses
```

Demo: simple college admissions database

```
College(cName, state, enrollment)
Student(sID, sName, GPA, sizeHS)
Apply(sID, cName, major, decision)
```