View in SQL

- General view
  - ➢ Virtual tables derived from base tables
  - ➢ Logical data independence
  - ➢ Security of data
  - ➢ Update problems of view
- Temporary view and recursive query
  - ➢ WITH
  - ➢ RECURSIVE

Update problems of view

- CREATE VIEW YoungSailor AS
    SELECT sid, sname, rating
    FROM Sailors
    WHERE age<26;
- CREATE VIEW Ratingavg AS
    SELECT rating, AVG(age)
    FROM Sailors
    GROUP BY rating;

Embedded SQL

- In order to access database in programs, and take further process to the query results, need to combine SQL and programming language (such as C / C++, etc.)
- Problems should be solved:
  - How to accept SQL statements in programming language
  - How to exchange data and messages between programming language and DBMS
  - The query result of DBMS is a set, how to transfer it to the variables in programming language
  - The data type of DBMS and programming language may not the same exactly.