



SQL Language

Queries in SQL

Exercise

STUDENT (SID, SName, City)

COURSE (CCode, CName, TID)

TEACHER (TID, TName, Depart)

EXAM (CCode, SID, Date, Grade)

- ⊃ For each student with average grade on exams greater than 28 and has taken exams on at least 10 different dates, show the student ID, the student name, and maximum, minimum, and average grade on exams

Exercise

STUDENT (SID, SName, City)

COURSE (CCode, CName, TID)

TEACHER (TID, TName, Depart)

EXAM (CCode, SID, Date, Grade)

- ⊃ For each student with average grade on exams greater than 28 and has taken exams on at least 10 different dates, show the student ID, the student name, and maximum, minimum, and average grade on exams

```
SELECT S.SID, Sname, MIN(Grade), MAX(Grade), AVG(Grade)
FROM STUDENT S, EXAM E
WHERE S.SID=E.SID
GROUP BY S.SID, Sname
HAVING AVG(Grade) >=28 AND COUNT (DISTINCT Date) >=18
```

Exercise

MAGAZINE (MID, MName, Publisher)

ARTICLE (AID, Title, Topic, MId)

- Find the identifiers and the names of the magazines that have published at least two articles about motorcycles

Exercise

MAGAZINE (MID, MName, Publisher)

ARTICLE (AID, Title, Topic, MId)

- Find the identifiers and the names of the magazines that have published at least two articles about motorcycles

```
SELECT M.MID, MName, Publisher
FROM MAGAZINE M, ARTICLE A
WHERE M.MID=A.MID AND Topic ='Motorcycle'
GROUP BY M.MID, Mname, Publisher
HAVING COUNT (*) >=2
```

Exercise

SAILOR (SID, SName, Expertise, DateofBirth)

BOOKING (SID, BID, Date)

BOAT(BID, BName, Color)

- Find the codes and the names of the sailors who have performed three bookings

Exercise

SAILOR (SID, SName, Expertise, DateofBirth)

BOOKING (SID, BID, Date)

BOAT(BID, BName, Color)

- Find the codes and the names of the sailors who have performed three bookings

```
SELECT S.SID, SName
FROM SAILOR S, BOOKING BK
WHERE S.Sid=BK.Sid
GROUP BY S.SID, SName
HAVING COUNT(*) =3
```

Exercise

SAILOR (SID, SName, Expertise, DateofBirth)

BOOKING (SID, BID, Date)

BOAT(BID, BName, Color)

- Find the codes and the names of the sailors who have booked at least two boats

Exercise

SAILOR (SID, SName, Expertise, DateofBirth)

BOOKING (SID, BID, Date)

BOAT(BID, BName, Color)

- Find the codes and the names of the sailors who have booked at least two boats

```
SELECT S.SID, SName
FROM SAILOR S, BOOKING BK
WHERE S.Sid=BK.Sid
GROUP BY S.SID, SName
HAVING COUNT(DISTINCT Bid)>=2
```

Exercise

AIRCRAFT (AID, AName, MaximumRange)

CERTIFICATE (AID, PID)

PILOT(PID, PName, Salary)

- ⇒ Find the codes and the names of the pilots who are qualified to fly on at least two aircrafts that can cover distances greater than 5,000 km ($\text{MaximumRange} \geq 5,000$)

Exercise

AIRCRAFT (AID, AName, MaximumRange)

CERTIFICATE (AID, PID)

PILOT(PID, PName, Salary)

- ⇒ Find the codes and the names of the pilots who are qualified to fly on at least two aircrafts that can cover distances greater than 5,000 km (MaximumRange >= 5,000)

```
SELECT P.PID, PName
FROM AIRCRAFT A, CERTIFICATE C, PILOT P
WHERE A.AID=C.AID AND C.PID=P.PID
      AND MaximumRange >= 5,000
GROUP BY P.PID, PName
HAVING COUNT(*) >=2
```