

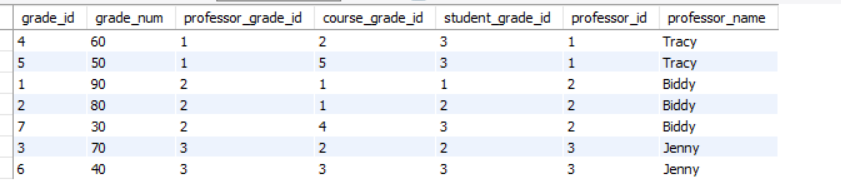
use practice1;

SELECT \*

FROM grades g [-left side]

INNER JOIN professors p [-right side]

ON p.professor\_id = g.professor\_grade\_id;



AVG GRADE FOR EACH PROFESSOR

use practice1;

SELECT p.professor\_name, avg(g.grade\_num)

FROM professors p

JOIN grades g

ON p.professor\_id = g.professor\_grade\_id

GROUP BY p.professor\_name;

Top grades for each student

use practice1;

SELECT s.student\_name,c.course\_name,max(g.grade\_num)

FROM students s

join grades g

on s.student\_id = g.student\_grade\_id

join courses c

on c.course\_id = g.course\_grade\_id

group by s.student\_name;

Group student by courses they enrolled in???

use practice1;

SELECT s.student\_name,c.course\_name

FROM students s

join grades g

on s.student\_id = g.student\_grade\_id

join courses c

on c.course\_id = g.course\_grade\_id

order by s.student\_name;

Average grade for each course sorted descending

use practice1;

SELECT avg(g.grade\_num) as Average\_Grade,c.course\_name

FROM grades g

join courses c

on c.course\_id = g.course\_grade\_id

group by c.course\_name

order by g.grade\_num desc;

Finding which student and professor have the most courses in common?

select student\_name,max(common) as common

from

(

SELECT s.student\_name,g.professor\_grade\_id,count(\*) as common

FROM students s

join grades g

on s.student\_id = g.student\_grade\_id

join courses c

on c.course\_id = g.course\_grade\_id

group by g.professor\_grade\_id, s.student\_name

) as hello;

returns

|  |  |
| --- | --- |
| Student\_name | Common |
| Kyle | 2 |

use practice1;

SELECT s.student\_name,g.professor\_grade\_id,count(\*) as common

FROM students s

join grades g

on s.student\_id = g.student\_grade\_id

join courses c

on c.course\_id = g.course\_grade\_id

group by g.professor\_grade\_id, s.student\_name;

returns

name|prof id| common

|  |  |  |
| --- | --- | --- |
| Kyle | 1 | 2 |
| Fei | 2 | 1 |
| Kristine | 2 | 1 |
| Kyle | 2 | 1 |
| Fei | 3 | 1 |
| Kyle | 3 | 1 |

select professors.professor\_name,b.student\_name,max(common) as similiarity

from professors

join(

SELECT s.student\_name,g.professor\_grade\_id,count(\*) as common

FROM students s

join grades g

on s.student\_id = g.student\_grade\_id

join courses c

on c.course\_id = g.course\_grade\_id

group by g.professor\_grade\_id, s.student\_name

) as b

on professors.professor\_id = b.professor\_grade\_id;

|  |  |  |
| --- | --- | --- |
| Professor\_name | Student\_name | similiarity |
| Tracy | Kyle | 2 |