













**The solutions:**

create database students;

use students;

create table students

(id int auto\_increment primary key,

first\_name varchar(100)

);

create table papers

(title varchar(100),

grade varchar(30),

student\_id int,

foreign key (student\_id) references students(id)

);

INSERT INTO students (first\_name) VALUES

('Caleb'), ('Samantha'), ('Raj'), ('Carlos'), ('Lisa');

INSERT INTO papers (student\_id, title, grade ) VALUES

(1, 'My First Book Report', 60),

(1, 'My Second Book Report', 75),

(2, 'Russian Lit Through The Ages', 94),

(2, 'De Montaigne and The Art of The Essay', 98),

(4, 'Borges and Magical Realism', 89);

select \* from students;

select \* from papers;

select first\_name, title, grade from students

join papers on students.id = papers.student\_id

order by grade desc;

select first\_name, title, grade from students

left join papers on students.id = papers.student\_id;

select first\_name, ifnull(title, 'missing') as title, ifnull(grade, 0) as grade from students

left join papers on students.id = papers.student\_id;

select first\_name, ifnull(avg(grade), 0) as average from students

left join papers on students.id = papers.student\_id

group by first\_name

order by average desc;

select first\_name, ifnull(avg(grade), 0) as average,

case

when ifnull(avg(grade), 0) > 80 then 'passing'

else 'failing'

end as passing\_status

from students

left join papers on students.id = papers.student\_id

group by first\_name

order by average desc;