

Problem 1

Database - `college`

Table

- Name - `college_individual`
- Columns - `id`, `name`, `email`, `mentor_id`

This table will be used to store the names of all the individuals of the college - students, mentors

The mentor_id, will refer to the `id` on the `individual` table. Individual's with mentor_id null are mentors.

college_individual

id	name	email	mentor_id
1	Mayank Pathak	mayank@gmail.com	<i>null</i>
2	Ankit Chaudhary	ankit@outlook.com	1
3	Vijay Saini	vijay@gmail.com	<i>null</i>
4	Harish Solanki	harish@outlook.con	1

Here, Mayank is the mentor of Ankit and Harish. Vijay is also a mentor, but he has no mentee.

Before Starting

- Create the database and table
- Populate the table with 20 entries. There should be at-least 5 mentors

Your challenge

- List all mentee's in alphabetical order.
- List all mentee's along with their mentors.
- List all mentee's whose mentor's are using `@gmail` email domain.

Problem 2

Database - `shop`

Table

- `customer`
 - Columns - `id`, `first_name`, `last_name`, `email`, `date_of_birth`
- `seller`
 - Columns - `id`, `name`, `gender`
- `sales`
 - Columns - `id`, `customer_id`, `seller_id`, `date`, `amount`

customer

id	first_name	last_name	email	date_of_birth
1	Mayank	Pathak	mayank@gmail.com	1988-01-14
2	Ankit	Chaudhary	ankit@outlook.com	1991-12-04
3	Vijay	Saini	vijay@gmail.com	1967-04-29
4	Harish	Solanki	harish@outlook.con	1973-07-11

seller

id	name	gender
1	Pooja Pathak	female
2	Chandan Chaudhary	male
3	Saloni Saini	female
4	Sandeep Solanki	male

sales

id	customer_id	seller_id	date	amount
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1	1	3	2017-01-14	2738
2	1	2	2017-12-04	9341
3	3	1	2017-04-29	8239
4	4	2	2017-07-11	4752

Before Starting

- Create the database and tables
- Populate the tables
 - 5 customers
 - 5 sellers
 - 15 sales

Your challenge

- List all sales with the following info
 - Customer Name (Name format - <lastname> , <firstname>)
 - Seller Name
 - Amount
- The list should be sorted the customer first name and also by the sale amount, in ascending order.
 - i.e. All purchase of Ankit should come before purchases of Mayank. If Mayank did two purchase, his first purchase shown should be of a lower value and the next of higher and so on.

Problem 3

Database - `shop`

Table

- `customer`
 - Columns - `id`, `first_name`, `last_name`, `email`, `date_of_birth`
- `seller`
 - Columns - `id`, `name`, `gender`
- `sales`
 - Columns - `id`, `customer_id`, `seller_id`, `date`, `amount`

customer

id	first_name	last_name	email	date_of_birth
1	Mayank	Pathak	mayank@gmail.com	1988-01-14
2	Ankit	Chaudhary	ankit@outlook.com	1991-12-04
3	Vijay	Saini	vijay@gmail.com	1967-04-29
4	Harish	Solanki	harish@outlook.con	1973-07-11

seller

id	name	gender
1	Pooja Pathak	female
2	Chandan Chaudhary	male
3	Saloni Saini	female
4	Sandeep Solanki	male

sales

id	customer_id	seller_id	date	amount
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1	1	3	2017-01-14	2738
2	1	2	2017-12-04	9341
3	3	1	2017-04-29	8239
4	4	2	2017-07-11	4752

Before Starting

- Create the database and tables
- Populate the tables
 - 5 customers
 - 5 sellers
 - 15 sales

Your challenge

- List the customers, with their total sale amount. The list should be ordered by the total sale amount.
- I.e. if a customer made two purchases of 100 and 200, their 300 should be available against their name.

Problem 4

Database - `shop`

Table

- `customer`
 - Columns - `id`, `first_name`, `last_name`, `email`, `date_of_birth`
- `seller`
 - Columns - `id`, `name`, `gender`
- `sales`
 - Columns - `id`, `customer_id`, `seller_id`, `date`, `amount`

customer

id	first_name	last_name	email	date_of_birth
1	Mayank	Pathak	mayank@gmail.com	1988-01-14
2	Ankit	Chaudhary	ankit@outlook.com	1991-12-04
3	Vijay	Saini	vijay@gmail.com	1967-04-29
4	Harish	Solanki	harish@outlook.con	1973-07-11

seller

id	name	gender
1	Pooja Pathak	female
2	Chandan Chaudhary	male
3	Saloni Saini	female
4	Sandeep Solanki	male

sales

id	customer_id	seller_id	date	amount
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1	1	3	2017-01-14	2738
2	1	2	2017-12-04	9341
3	3	1	2017-04-29	8239
4	4	2	2017-07-11	4752

Before Starting

- Create the database and tables
- Populate the tables
 - 5 customers
 - 5 sellers
 - 15 sales

Your challenge

- List all the sales, which were sold by a female to a person who is older than the age 35.
- The list should be sorted by amount of sale.