

# SQL - запросы

База данных billing\_simple

Таблица billing

```
`payer_email` VARCHAR(255) NULL,  
`recipient_email` VARCHAR(255) NULL,  
`sum` DECIMAL(18,2) NULL,  
`currency` VARCHAR(3) NULL,  
`billing_date` DATE NULL,  
`comment` TEXT NULL
```

# SQL - запросы



1. `use billing_simple;`
- 2.
3. `select * from billing;`

Result Set Filter:  Export: Wrap Cell Content:

#	payer_email	recipient_email	sum	currency	billing_date	comment
1	vasya@mail.com	petya@mail.com	681.00	AUD	2013-12-20	Procrastinator? No, I just wait until the last second to do my work because I will be older, therefore wiser.
2	petya@mail.com	ivan@mail.com	714.00	EUR	2022-12-20	You remind me of my Chinese friend...Ug Lee.
3	ivan@mail.com	bobby@mail.com	338.00	SGD	2014-01-20	I just dropped my laptop off the boat.....It's a Dell, rolling in the deep.
4	bobby@mail.com	lenny@mail.com	157.00	INR	2017-06-20	I was planning to do something today, but I haven't finished doing nothing from yesterday.
5	lenny@mail.com	alex@mail.com	623.00	CHF	2004-01-20	I just dropped my laptop off the boat.....It's a Dell, rolling in the deep.
6	alex@mail.com	john@mail.com	722.00	EUR	2002-09-20	I feel like getting something done today, so I'm just going to sit here until the feeling passes.
7	john@mail.com	leo@mail.com	198.00	JPY	2019-08-20	Whatever you do in life give 100%.....unless you're giving blood.
8	leo@mail.com	enzo@mail.com	240.00	MYR	2020-06-20	I was complimented on my driving. Someone left a note on my windshield that said, 'Parking Fine.'
9	enzo@mail.com	franz@mail.com	647.00	IPY	2008-03-20	I was complimented on my driving. Someone left a note on my windshield that said, 'Parking Fine.'

# SQL - запросы



1. **use** billing\_simple;
- 2.
3. **select** payer\_email, sum **from** billing;

Query Results Table:

payer_email	sum
vasya@mail.com	681.00
petya@mail.com	714.00
ivan@mail.com	338.00
bobby@mail.com	157.00
lenny@mail.com	623.00
alex@mail.com	722.00
john@mail.com	198.00
leo@mail.com	240.00
enzo@mail.com	647.00
franz@mail.com	960.00
vasya@mail.com	141.00
petya@mail.com	776.00

# SQL - запросы



1. `use billing_simple;`
- 2.
3. `select * from billing WHERE sum > 900;`

Result Set Filter:  Export: Wrap Cell Content:

#	payer_email	recipient_email	sum	currency	billing_date	comment
1	franz@mail.com	vasya@mail.com	960.00	CHF	2009-07-20	I really like ceilings.....I guess you could call me a ceiling fan.
2	alex@mail.com	leo@mail.com	997.00	MYR	2010-08-20	Better late then never, but never late is better.
3	vasya@mail.com	bobby@mail.com	930.00	GBP	2009-01-20	Whatever you do in life give 100%.....unless you're giving blood.
4	leo@mail.com	petya@mail.com	993.00	JPY	2030-03-20	I changed all my passwords to 'incorrect'. So my computer just tells me when I forgot.
5	petya@mail.com	john@mail.com	925.00	USD	2009-07-20	Grammar is somewhat important. Commas do save lives for instance: 'Let's eat grandpa.' 'Lets eat. grandpa.'
6	vasya@mail.com	john@mail.com	942.00	CHF	2007-12-20	Better late then never, but never late is better.
7	alex@mail.com	bobby@mail.com	979.00	GBP	2015-04-20	One time at the beach this guy was swimming in the ocean yelling Help! Shark! Help!. I just laughed, I knew that shark wasn't going to help them.
8	enzo@mail.com	leo@mail.com	990.00	INR	2001-09-20	I dream of a better tomorrow, where chickens can cross the road and not be questioned about their motives.

# SQL - запросы



```
1. use billing_simple;
2
3. select * from billing
4. WHERE sum>900 AND currency='CHF';
```

Result Set Filter:  Export: Wrap Cell Content:

#	payer_email	recipient_email	sum	currency	billing_date	comment
1	franz@mail.com	vasya@mail.com	960.00	CHF	2009-07-20	I really like ceilings.....I guess you could call me a ceiling fan.
2	vasya@mail.com	john@mail.com	942.00	CHF	2007-12-20	Better late then never, but never late is better.



# SQL - запросы



```
1. use billing_simple;
2
3. select * from billing
4. WHERE sum>900 AND currency IN ('CHF', 'GBP');
```

Result Set Filter:  Export: Wrap Cell Content:

#	payer_email	recipient_email	sum	currency	billing_date	comment
1	franz@mail.com	vasya@mail.com	960.00	CHF	2009-07-20	I really like ceilings.....I guess you could call me a ceiling fan.
2	vasya@mail.com	bobby@mail.com	930.00	GBP	2009-01-20	Whatever you do in life give 100%.....unless you're giving blood.
3	vasya@mail.com	john@mail.com	942.00	CHF	2007-12-20	Better late then never, but never late is better.
4	alex@mail.com	bobby@mail.com	979.00	GBP	2015-04-20	One time at the beach this guy was swimming in the ocean yelling Help! Shark! Help!. I just laughed, I knew that shark wasn't going to help them.

# SQL - запросы



```
1. use billing_simple;
2
3. select * from billing
4. WHERE sum>900 AND currency NOT IN ('CHF', 'GBP');
```

Result Set Filter:  Export: Wrap Cell Content:

#	payer_email	recipient_email	sum	currency	billing_date	comment
1	alex@mail.com	leo@mail.com	997.00	MYR	2010-08-20	Better late then never, but never late is better.
2	leo@mail.com	petya@mail.com	993.00	JPY	2030-03-20	I changed all my passwords to 'incorrect'. So my computer just tells me when I forgot.
3	petya@mail.com	john@mail.com	925.00	USD	2009-07-20	Grammar is somewhat important. Commas do save lives for instance: 'Let's eat grandpa.' 'Lets eat, grandpa.'
4	enzo@mail.com	leo@mail.com	990.00	INR	2001-09-20	I dream of a better tomorrow, where chickens can cross the road and not be questioned about their motives.

# SQL - запросы



```
1. SELECT * FROM billing;  
2  
3. INSERT INTO billing VALUES (  
4. 'alex@mail.com',  
5. 'leo@mail.com',  
6. '500.00', 'MYR',  
7. '2010-08-20',  
8. 'Here are some money for you');
```

Alt Set Filter:  Export: Wrap Cell Content:

payer_email	recipient_email	sum	currency	billing_date	comment
vasya@mail.com	petya@mail.com	681.00	AUD	2013-12-20	Procrastinator? No, I just wait until the last second to do my work because I will be older, therefore wiser.
petya@mail.com	ivan@mail.com	714.00	EUR	2022-12-20	You remind me of my Chinese friend...Ug Lee.
ivan@mail.com	bobby@mail.com	338.00	SGD	2014-01-20	I just dropped my laptop off the boat.....It's a Dell, rolling in the deep.
bobby@mail.com	lenny@mail.com	157.00	INR	2017-06-20	I was planning to do something today, but I haven't finished doing nothing from yesterday.
lenny@mail.com	alex@mail.com	623.00	CHF	2004-01-20	I just dropped my laptop off the boat.....It's a Dell, rolling in the deep.
alex@mail.com	john@mail.com	722.00	EUR	2002-09-20	I feel like getting something done today, so I'm just going to sit here until the feeling passes.
john@mail.com	leo@mail.com	198.00	JPY	2019-08-20	Whatever you do in life give 100%.....unless you're giving blood.
leo@mail.com	enzo@mail.com	240.00	MYR	2020-06-20	I was complimented on my driving. Someone left a note on my windshield that said, 'Parking Fine.'
enzo@mail.com	franz@mail.com	647.00	JPY	2008-03-20	I was complimented on my driving. Someone left a note on my windshield that said, 'Parking Fine.'
franz@mail.com	vasya@mail.com	960.00	CHF	2009-07-20	I really like ceilings.....I guess you could call me a ceiling fan.
vasya@mail.com	ivan@mail.com	141.00	MYR	2026-11-20	I was complimented on my driving. Someone left a note on my windshield that said, 'Parking Fine.'



# SQL – запросы(инвариант)



```
INSERT INTO billing (  
    payer_email, recipient_email,  
    sum, currency, billing_date)  
VALUES (  
    'alex@mail.com',  
    'leo@mail.com',  
    '500.00', 'MYR',  
    '2010-08-20');
```

# SQL - запросы



```
1. SELECT * FROM billing
2   WHERE payer_email='alex@mail.com'
3   AND recipient_email='leo@mail.com'
4   AND sum=500.00;
5
6. UPDATE billing
7   SET currency='USD'
8   WHERE payer_email='alex@mail.com'
9   AND recipient_email='leo@mail.com'
10  AND sum=500.00;
11
```

При отсутствии указанных значений в БД – выбрать любое значение из базы данных

Result Set Filter:  Export: Wrap Cell Content:

#	payer_email	recipient_email	sum	currency	billing_date	comment
1	alex@mail.com	leo@mail.com	500.00	MYR	2010-08-20	Here are some money for you
2	alex@mail.com	leo@mail.com	500.00	MYR	2010-08-20	XXXX

## База услуг компании

Одна таблица с полями:

- Название проекта
- Имя клиента
- Срок начала работы (не указан, если проект не начат)
- Срок сдачи (не указан, если за проект еще не завершено)
- Бюджет

# SQL - запросы



База данных

project\_simple

Таблица project

```
`project_name` VARCHAR(255) NULL,  
`client_name` VARCHAR(255) NULL,  
`project_start` DATE NULL,  
`project_finish` DATE NULL,  
`budget` DECIMAL(18,2) NULL)
```

|

# SQL - запросы



```
1
2 • USE project_simple;
3
4 • SELECT COUNT(1) FROM project;
5
6
7
8
9
10
11
12
13
```

Result Set Filter:  Export: Wrap Cell Content:

#	COUNT(1)
1	100



# SQL - запросы



```
1
2 • USE project_simple;
3
4 • SELECT AVG(budget) FROM project;
5
6
7
8
9
10
11
12
13
```

Result Set Filter:  Export: Wrap Cell Content:

#	AVG(budget)
1	484532.150000

# SQL - запросы

```
USE project_simple;  
SELECT AVG(budget) FROM project;
```

```
SELECT  
    project_finish,  
    project_start,  
    DATEDIFF(DAY, project_start, project_finish)  
FROM project;
```



# SQL - запросы



```
2. USE project_simple;
3
4. SELECT AVG(budget) FROM project;
5
6
7. SELECT
8     project_finish,
9     project_start,
10    DATEDIFF(project_finish, project_start)
11 FROM project WHERE project_finish is not null;
12
13
14
```

Найти ошибку

Result Set Filter:  Export: Wrap Cell Content:

#	project_finish	project_start	DATEDIFF(project_finish, project_start)
1	2029-12-20	2027-02-20	1034
2	2021-08-20	2018-02-20	1277
3	2022-12-20	2006-02-20	6147
4	2027-09-20	2018-01-20	3530
5	2018-10-20	2007-04-20	4201
6	2025-12-20	2012-05-20	4962
7	2028-08-20	2002-06-20	9558
8	2019-09-20	2009-02-20	3864
9	2024-10-20	2023-05-20	519

# SQL - запросы



```
2. USE project_simple;
3
4. SELECT AVG(budget) FROM project;
5
6
7. SELECT
8     AVG(DATEDIFF(project_finish, project_start))
9 FROM project WHERE project_finish is not null;
10
11
12
13
```

Найти ошибку

Result Set Filter:  Export: Wrap Cell Content:

#	AVG(DATEDIFF(project_finish, project_start))
1	3786.8103

# SQL - запросы

```
1
2 • USE project_simple;
3
4 • SELECT * FROM project;
5
6
7 • SELECT
8     AVG(DATEDIFF(project_finish, project_start)),
9     MAX(DATEDIFF(project_finish, project_start)),
10    MIN(DATEDIFF(project_finish, project_start)),
11 • FROM project WHERE project_finish is not null;
12
13
```

Найти ошибку