

EDABA Task 2

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SELECT queries description

Query #1. Id and name of equipment that has never been rented to employees (equipment id does not exist in equipment_rental table).

```
SELECT e.id, e.name
FROM equipment e
LEFT JOIN equipment_rental er
  ON e.id = er.equipment
WHERE er.equipment IS NULL
ORDER BY e.id ASC;
```

Query #2. Employees name and surname (concatenated) that have the biggest earnings per hour.

```
SELECT name || ' ' || surname AS employee, earnings_per_hour
FROM employees
WHERE earnings_per_hour = (SELECT MAX(earnings_per_hour) FROM employees);
```

Query #3. Employees with numbers of contracts that they took part.

```
SELECT e.name , e.surname, COUNT(lc.employee) AS nr_of_contracts
FROM employees e
INNER JOIN lease_contracts lc
  ON e.id = lc.employee
GROUP BY e.name, e.surname
ORDER BY nr_of_contracts DESC;
```

Query #4. Rounded to 2 decimal places average price of lease contracts.

```
SELECT ROUND(AVG(price), 2) AS avg_price FROM lease_contracts;
```

Query #5. Lease contracts with opinions and name of the reviewer.

```
SELECT lc.id, lc.price, lc.date_begin, lc.date_end, co.mark, rd.name
FROM lease_contracts lc
INNER JOIN contract_opinions co
  ON lc.id = co.contract
INNER JOIN reviewers_dictionary rd
  ON co.reviewer = rd.id
ORDER BY lc.id ASC;
```

Query #6. Number of archival and non-archival employees.

```
SELECT is_archival, COUNT(is_archival)
FROM employees
GROUP BY is_archival;
```

Query #7. Employees that started working in 2016 or 2017.

```
SELECT name, surname, date_begin
FROM employees
WHERE EXTRACT(year FROM date_begin) = 2016
      OR EXTRACT(year FROM date_begin) = 2017;
```

The same query written in another way (using IN).

```
SELECT name, surname, date_begin
FROM employees
WHERE EXTRACT(year FROM date_begin) IN (2016, 2017);
```

Query #8. Contracts that length (time between beginning and ending) is smaller than 1000 days.

```
SELECT id, date_begin, date_end, date_end - date_begin AS length
FROM lease_contracts
GROUP BY id, date_begin, date_end
HAVING date_end - date_begin < 1000;
```

Query #9. Clients that do not take part in any leasing contracts (client id does not exist in lease_contract).

```
SELECT c.id, c.name
FROM lease_contracts lc
RIGHT JOIN clients c
      ON lc.client = c.id
WHERE lc.client IS NULL;
```

Query #10. Programming languages with number of employees that use them (from most popular).

```
SELECT ld.name, COUNT(e.programming_language)
FROM languages_dictionary ld
INNER JOIN employees e
      ON ld.id = e.programming_language
GROUP BY ld.name
ORDER BY COUNT(e.programming_language) DESC;
```