

A

Task №1

In this task we will use service [draw-sql](#)



Task №2

```
CREATE SCHEMA IF NOT EXISTS travels;
```

```
CREATE TABLE travels.Employee (  
    id INT PRIMARY KEY,  
    employee_name VARCHAR(10)  
);
```

```
CREATE TABLE travels.Trip (  
    id INT PRIMARY KEY,  
    employee_id INT,  
    startdate DATE,  
    enddate DATE,  
    cancelationdate DATE,  
    hotel_id INT,  
    ticket_1_id INT,  
    ticket_2_id INT  
);
```

```
CREATE TABLE travels.Flight (  
    flight_number INT PRIMARY KEY,  
    oigin_city_id INT,  
    destination_city_id INT,  
    air_company VARCHAR(10),  
    departure TIMESTAMP,  
    ticket_price FLOAT  
);
```

```
CREATE TABLE travels.Hotel (  
    id INT PRIMARY KEY,  
    hotel_name VARCHAR(10),  
    hotel_address VARCHAR(10),  
    city_id INT,  
    room_charge FLOAT  
);
```

```
CREATE TABLE travels.City (  
    id INT PRIMARY KEY,  
    city_name VARCHAR(10)  
);
```

```
ALTER TABLE travels.Trip ADD FOREIGN KEY (employee_id) REFERENCES
travels.Employee (id);

ALTER TABLE travels.Trip ADD FOREIGN KEY (hotel_id) REFERENCES
travels.Hotel (id);

ALTER TABLE travels.Trip ADD FOREIGN KEY (ticket_1_id) REFERENCES
travels.Flight (flight_number);

ALTER TABLE travels.Trip ADD FOREIGN KEY (ticket_2_id) REFERENCES
travels.Flight (flight_number);

ALTER TABLE travels.Hotel ADD FOREIGN KEY (city_id) REFERENCES
travels.City (id);

ALTER TABLE travels.Flight ADD FOREIGN KEY (oigin_city_id) REFERENCES
travels.City (id);

ALTER TABLE travels.Flight ADD FOREIGN KEY (destination_city_id)
REFERENCES travels.City (id);
```

Task №3

```
SELECT DISTINCT travels.Hotel.id, travels.Hotel.hotel_name
FROM
    travels.Employee,
    travels.Trip,
    travels.Flight,
    travels.City AS from_city,
    travels.City AS to_city,
    travels.Hotel
WHERE travels.Employee.id = travels.Trip.employee_id
    AND travels.Trip.ticket_1_id = travels.Flight.flight_number

    -- Employees who travel from Berlin to Paris
    AND travels.Flight.origin_city_id = from_city.id
    AND travels.Flight.destination_city_id = from_city.id
    AND from_city.name LIKE "%Berlin%"
    AND to_city.name LIKE "%Paris%"

    -- Employees who travel this year and their flights were not cancelled
    AND travels.Trip.canceletiondate IS NULL
    AND travels.Trip.startdate
        BETWEEN to_date('01-01-2022', 'dd-mm-yyyy')
        AND to_date('31-12-2022', 'dd-mm-yyyy')

    -- Hotels booked in these flights
    AND travels.Trip.hotel_id = travels.Hotel.id;
```

Task N°4

Task N°5

Task N°6

Task N°7