1. Table Creations for 1st Half:

• Jobs:

```
CREATE TABLE Job (
job_id INT AUTO_INCREMENT,
job_name VARCHAR(255) NOT NULL,
salary BIGINT NOT NULL,
hours INT NOT NULL,
PRIMARY KEY (job_id)
);
```

• Departments:

```
CREATE TABLE Departments (
dept_id INT AUTO_INCREMENT,
dept_name VARCHAR(255) NOT NULL,
PRIMARY KEY (dept_id)
);
```

• Employees:

```
CREATE TABLE Employees (
emp_id INT AUTO_INCREMENT,
first_name VARCHAR(50) NOT NULL,
middle_name VARCHAR(50) NOT NULL,
last_name VARCHAR(50) NOT NULL,
phone_number VARCHAR(15) NOT NULL,
email VARCHAR(255) NOT NULL,
super_id INT,
job_id INT,
dept_id INT,
PRIMARY KEY (emp_id)
);
```

2. Foreign Key Conditions for 1st Half:

ALTER TABLE Employees
MODIFY dept_id INT,
ADD FOREIGN KEY (dept_id) REFERENCES Departments(dept_id) ON
UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE Employees
MODIFY super_id INT,
ADD FOREIGN KEY (super_id) REFERENCES Employees(emp_id) ON
UPDATE CASCADE ON DELETE SET NULL;

ALTER TABLE Employees
MODIFY job_id INT,
ADD FOREIGN KEY (job_id) REFERENCES Jobs(job_id) ON UPDATE
CASCADE ON DELETE SET NULL;

3. Table Creations For 2nd Half:

• Flights:

```
CREATE TABLE Flights (
 flight id INTEGER PRIMARY KEY AUTO INCREMENT,
  depart airport VARCHAR(255) NOT NULL,
  depart time DATETIME NOT NULL,
  duration TIMESTAMP NOT NULL,
  status VARCHAR(50) NOT NULL,
  aircraft type VARCHAR(50) NOT NULL,
  gate VARCHAR(10) NOT NULL,
  arr airport VARCHAR(255) NOT NULL,
  arr time DATETIME GENERATED ALWAYS AS
(TIMESTAMPADD(SECOND, TIME TO SEC(duration), depart time))
STORED
);
  • Tickets:
CREATE TABLE Tickets (
 ticket id INT PRIMARY KEY AUTO INCREMENT,
  pass id INT,
 price FLOAT,
  class VARCHAR(20) CHECK (class IN ('Economy', 'Premium Economy',
'Business', 'First'))
);
  • Passengers:
CREATE TABLE Passengers (
```

```
Pass_id INTEGER PRIMARY KEY AUTO_INCREMENT, first_name VARCHAR(255) NOT NULL, last_name VARCHAR(255) NOT NULL, phone_number VARCHAR(15) NOT NULL, email VARCHAR(255) NOT NULL, carry_on BOOLEAN NOT NULL, baggage BOOLEAN NOT NULL, flight_id INTEGER,
```

```
ticket_id INTEGER
);
```

• Baggage:

```
CREATE TABLE Baggage (
bag_id INTEGER PRIMARY KEY AUTO_INCREMENT,
weight FLOAT NOT NULL DEFAULT 0,
status VARCHAR(255) NOT NULL DEFAULT 'pending',
pass_id INTEGER NOT NULL,
destination VARCHAR(255) DEFAULT 'pending',
weight_status VARCHAR(50) DEFAULT 'Normal';
);
```

4. Foreign Key Conditions for 2nd Half:

ALTER TABLE Baggage MODIFY COLUMN pass_id INTEGER, ADD FOREIGN KEY (pass_id) REFERENCES Passengers(pass_id) ON UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE Passengers
MODIFY COLUMN ticket_id INTEGER,
ADD FOREIGN KEY (ticket_id) REFERENCES Tickets(ticket_id) ON UPDATE
CASCADE ON DELETE SET NULL;

ALTER TABLE Passengers
MODIFY COLUMN flight_id INTEGER,
ADD FOREIGN KEY (flight_id) REFERENCES Flights(flight_id) ON UPDATE
CASCADE ON DELETE SET NULL;

ALTER TABLE Tickets
MODIFY COLUMN pass_id INTEGER,
ADD FOREIGN KEY (pass_id) REFERENCES Passengers(pass_id) ON
UPDATE CASCADE ON DELETE CASCADE;

5. Triggers for 2nd half:

• Automatically insert bag record if passenger's baggage = 1 (true):

```
DELIMITER //
CREATE TRIGGER insert into baggage
AFTER INSERT ON Passengers
FOR EACH ROW
BEGIN
  IF NEW.baggage = 1 THEN
    INSERT INTO Baggage (pass id, destination, weight, status)
    VALUES (
      NEW.pass id,
      (SELECT arr airport FROM Flights WHERE flight_id =
NEw.flight id), DEFAULT, DEFAULT
    );
  END IF;
END;
//
DELIMITER;
```

• Automatically set bag's weight status to overweight if its weight is more than 18kg:

```
DELIMITER //
CREATE TRIGGER set_weight_status
BEFORE INSERT ON baggage
FOR EACH ROW
BEGIN
IF NEW.weight > 18 THEN
SET NEW.weight_status = 'Overweight';
ELSEIF NEW.weight_status = 'Pending';
ELSE
SET NEW.weight_status = 'Pending';
ELSE
SET NEW.weight_status = 'Normal';
END IF;
```

```
END;
//
DELIMITER;
```

• Automatically add give a passenger a ticket_id:

```
DELIMITER //
CREATE TRIGGER after_insert_passenger
AFTER INSERT ON passengers
FOR EACH ROW
BEGIN
INSERT INTO tickets (pass_id, class, price)
VALUES (NEW.pass_id, 'pending', 0);
END;
//
DELIMITER;
```

6. Value Insertion For 1st Half:

• Department:

```
INSERT INTO Departments (dept name) VALUES
 ('Airport Operations'),
 ('Security'),
 ('Customer Service'),
 ('Air Traffic Control'),
 ('Airlines and Ground Handling'),
 ('Retail and Concessions'),
 ('Maintenance and Facilities'),
 ('Finance'),
 ('Technology and IT'),
 ('Emergency Services'),
 ('Customs and Immigration'),
 ('Environmental and Sustainability'),
 ('Pilots'),
 ('Aircraft Maintenance'),
 ('Flight Operations'),
 ('Cabin Crew'),
 ('Aircraft Ground Handling'),
 ('Fueling and Logistics'),
 ('Aircraft Charter and Sales'),
 ('Aircraft Dispatch and Coordination'),
 ('Aircraft Safety and Compliance'),
 ('Aircraft Support Services');
```

• Jobs:

```
INSERT INTO jobs (job_name, salary, hours) VALUES ('Airport Operations Manager', 100000, 40), ('Operations Coordinator', 60000, 40), ('Airside Operations Specialist', 75000, 40), ('Landside Operations Officer', 65000, 40), ('Ground Operations Supervisor', 85000, 45);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Airport Security Officer', 55000, 40),
```

```
('Security Screener', 45000, 40),
('Security Supervisor', 60000, 40),
('Aviation Security Manager', 80000, 45),
('Security Compliance Specialist', 70000, 40);
```

INSERT INTO jobs (job_name, salary, hours) VALUES ('Customer Service Representative', 45000, 40), ('Passenger Service Agent', 40000, 40), ('Airport Information Desk Attendant', 38000, 40), ('Lost and Found Coordinator', 42000, 40), ('Passenger Assistance Specialist', 48000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Air Traffic Controller', 90000, 40), ('Tower Controller', 80000, 40), ('Approach and Departure Controller', 85000, 40), ('En Route Controller', 95000, 40), ('Air Traffic Control Specialist', 75000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Ramp Agent', 35000, 40), ('Baggage Handler', 32000, 40), ('Aircraft Cleaner', 30000, 40), ('Passenger Service Supervisor', 50000, 40), ('Cargo Operations Coordinator', 45000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Airport Retail Manager', 60000, 40), ('Concessions Coordinator', 50000, 40), ('Sales Associate', 35000, 40), ('Duty-Free Shop Attendant', 32000, 40), ('Food and Beverage Supervisor', 48000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Facilities Manager', 70000, 40), ('Airport Maintenance Technician', 55000, 40), ('Janitorial Supervisor', 48000, 40), ('HVAC Technician', 60000, 40), ('Electrician', 65000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Airport Finance Manager', 80000, 40), ('Budget Analyst', 60000, 40), ('Administrative Assistant', 40000, 40), ('Human Resources Specialist', 55000, 40), ('Procurement Officer', 65000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Airport IT Manager', 85000, 40), ('Systems Administrator', 70000, 40), ('Network Engineer', 75000, 40), ('Help Desk Support', 50000, 40), ('Cybersecurity Analyst', 80000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Emergency Operations Center Coordinator', 60000, 40), ('Emergency Medical Technician (EMT)', 50000, 40), ('Airport Rescue and Firefighting (ARFF) Specialist', 55000, 40), ('Airport Firefighter', 60000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Customs Officer', 55000, 40), ('Immigration Officer', 55000, 40), ('Border Protection Agent', 60000, 40), ('Passport Control Officer', 50000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Environmental Compliance Specialist', 65000, 40), ('Sustainability Coordinator', 60000, 40), ('Environmental Engineer', 70000, 40), ('Green Initiatives Manager', 75000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Captain', 120000, 40), ('First Officer (Co-Pilot)', 80000, 40), ('Flight Engineer', 90000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Aircraft Maintenance Technician (AMT)', 60000, 40), ('Avionics Technician', 65000, 40),

```
('Aircraft Inspector', 70000, 40),
('Line Maintenance Technician', 55000, 40),
('Aircraft Mechanic', 60000, 40);
```

INSERT INTO jobs (job_name, salary, hours) VALUES ('Flight Dispatcher', 70000, 40), ('Flight Operations Officer', 75000, 40), ('Flight Coordinator', 65000, 40), ('Load Planner', 60000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Cabin Supervisor', 50000, 40), ('Flight Attendant', 45000, 40), ('Purser', 55000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Ramp Supervisor', 60000, 40), ('Aircraft Cleaner', 35000, 40), ('Baggage Handler', 32000, 40), ('Cargo Loader', 40000, 40), ('Aircraft Marshaller', 45000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Aircraft Fueler', 35000, 40), ('Fueling Supervisor', 50000, 40), ('Logistics Coordinator', 45000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Aircraft Charter Sales Representative', 60000, 40), ('Aircraft Sales Manager', 80000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Airline Operations Controller', 75000, 40), ('Operations Dispatcher', 60000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES ('Aviation Safety Inspector', 80000, 40), ('Compliance Officer', 70000, 40);

INSERT INTO jobs (job_name, salary, hours) VALUES

```
('Aircraft Tug Driver', 40000, 40),
('Lavatory Service Technician', 35000, 40),
('Catering Coordinator', 45000, 40);
```

• Employees:

INSERT INTO Employees (emp_id, dept_id, first_name, middle_name, last_name, phone_number, email)

VALUES

- (1, 1, 'John', 'Alexander', 'Smith', '555-123-4567', 'john.smith@gmail.com'),
- (2, 1, 'Emily', 'Grace', 'Johnson', '555-234-5678', 'emily.johnson@hotmail.com'),
- (3, 1, 'Michael', 'Christopher', 'Davis', '555-345-6789', 'michael.davis@yahoo.com'),
- (4, 1, 'Jessica', 'Lynn', 'Wilson', '555-456-7890', 'jessica.wilson@outlook.com'),
- (5, 1, 'Brian', 'Patrick', 'Taylor', '555-567-8901', 'brian.taylor@gmail.com'),
- (6, 2, 'Ashley', 'Marie', 'Anderson', '555-678-9012',

'ashley.anderson@hotmail.com'),

- (7, 2, 'David', 'William', 'Thompson', '555-789-0123',
- 'david.thompson@yahoo.com'),
- (8, 2, 'Samantha', 'Nicole', 'Martinez', '555-890-1234',

'samantha.martinez@outlook.com'),

- (9, 2, 'Christopher', 'James', 'Jackson', '555-901-2345', 'christopher.jackson@gmail.com'),
- (10, 2, 'Olivia', 'Rose', 'White', '555-012-3456', 'olivia.white@hotmail.com'),
- (11, 3, 'Daniel', 'Robert', 'Harris', '555-123-4567', 'daniel.harris@yahoo.com'),
- (12, 3, 'Sophia', 'Elizabeth', 'Nelson', '555-234-5678', 'sophia.nelson@outlook.com'),
- (13, 3, 'Matthew', 'David', 'Baker', '555-345-6789', 'matthew.baker@gmail.com'),
- (14, 3, 'Ava', 'Grace', 'Turner', '555-456-7890', 'ava.turner@hotmail.com'),
- (15, 3, 'Andrew', 'Joseph', 'Wright', '555-567-8901', 'andrew.wright@yahoo.com'),
- (16, 4, 'Emma', 'Katherine', 'Reed', '555-678-9012', 'emma.reed@outlook.com'),
- (17, 4, 'Joseph', 'Michael', 'Garcia', '555-789-0123', 'joseph.garcia@gmail.com'),
- (18, 4, 'Mia', 'Catherine', 'Miller', '555-890-1234', 'mia.miller@hotmail.com'),
- (19, 4, 'Ethan', 'Alexander', 'Scott', '555-901-2345', 'ethan.scott@yahoo.com'),
- (20, 4, 'Isabella', 'Grace', 'King', '555-012-3456', 'isabella.king@outlook.com'),
- (21, 5, 'Alexander', 'Thomas', 'Rivera', '555-123-4567', 'alexander.rivera@gmail.com'),
- (22, 5, 'Aria', 'Elizabeth', 'Cooper', '555-234-5678', 'aria.cooper@hotmail.com'),
- (23, 5, 'James', 'Richard', 'Hayes', '555-345-6789', 'james.hayes@yahoo.com'),

```
(24, 5, 'Grace', 'Ann', 'Collins', '555-456-7890', 'grace.collins@outlook.com'),
(25, 5, 'Benjamin', 'Edward', 'Russell', '555-567-8901',
'benjamin.russell@gmail.com'),
(26, 6, 'Lily', 'Marie', 'Griffin', '555-678-9012', 'lily.griffin@hotmail.com'),
(27, 6, 'Logan', 'Alexander', 'Simmons', '555-789-0123',
'logan.simmons@yahoo.com'),
(28, 6, 'Chloe', 'Nicole', 'Martinez', '555-890-1234', 'chloe.martinez@outlook.com'),
(29, 6, 'Samuel', 'Joseph', 'Perry', '555-901-2345', 'samuel.perry@gmail.com'),
(30, 6, 'Zoey', 'Marie', 'Edwards', '555-012-3456', 'zoey.edwards@hotmail.com'),
(31, 7, 'Jackson', 'William', 'Turner', '555-123-4567', 'jackson.turner@yahoo.com'),
(32, 7, 'Madison', 'Elizabeth', 'Cox', '555-234-5678', 'madison.cox@outlook.com'),
(33, 7, 'Lucas', 'Benjamin', 'Ramirez', '555-345-6789', 'lucas.ramirez@gmail.com'),
(34, 7, 'Penelope', 'Grace', 'Bryant', '555-456-7890',
'penelope.bryant@hotmail.com'),
(35, 7, 'Dylan', 'Michael', 'Stewart', '555-567-8901', 'dylan.stewart@yahoo.com'),
(36, 8, 'Scarlett', 'Elizabeth', 'Washington', '555-678-9012',
'scarlett.washington@outlook.com'),
(37, 8, 'Caleb', 'Matthew', 'Evans', '555-789-0123', 'caleb.evans@gmail.com'),
(38, 8, 'Hannah', 'Marie', 'Murphy', '555-890-1234',
'hannah.murphy@hotmail.com'),
(39, 8, 'Wyatt', 'Anthony', 'Parker', '555-901-2345', 'wyatt.parker@yahoo.com'),
(40, 8, 'Addison', 'Nicole', 'Richardson', '555-012-3456',
'addison.richardson@outlook.com').
(41, 9, 'Gabriel', 'Alexander', 'Henderson', '555-123-4567'.
'gabriel.henderson@gmail.com'),
(42, 9, 'Leah', 'Marie', 'Coleman', '555-234-5678', 'leah.coleman@hotmail.com'),
(43, 9, 'Christopher', 'James', 'Reed', '555-345-6789',
'christopher.reed@yahoo.com'),
(44, 9, 'Lily', 'Rose', 'Russell', '555-456-7890', 'lily.russell@outlook.com'),
(45, 9, 'Zachary', 'Thomas', 'Morgan', '555-567-8901',
'zachary.morgan@gmail.com'),
(46, 10, 'Stella', 'Marie', 'Peterson', '555-678-9012', 'stella.peterson@hotmail.com'),
(47, 10, 'Owen', 'Alexander', 'Brooks', '555-789-0123', 'owen.brooks@yahoo.com'),
(48, 10, 'Lillian', 'Grace', 'Henderson', '555-890-1234',
'lillian.henderson@outlook.com'),
(49, 10, 'Levi', 'Thomas', 'Cooper', '555-901-2345', 'levi.cooper@gmail.com'),
(50, 11, 'Nora', 'Rose', 'Hayes', '555-012-3456', 'nora.hayes@hotmail.com'),
(51, 11, 'Evan', 'Michael', 'Simmons', '555-123-4567',
'evan.simmons@yahoo.com'),
```

```
(52, 11, 'Addison', 'Grace', 'Stewart', '555-234-5678',
'addison.stewart@outlook.com'),
(53, 11, 'William', 'Thomas', 'Perry', '555-345-6789', 'william.perry@gmail.com'),
(54, 12, 'Sofia', 'Grace', 'Cox', '555-456-7890', 'sofia.cox@hotmail.com'),
(55, 12, 'Isaac', 'Benjamin', 'Murphy', '555-567-8901', 'isaac.murphy@yahoo.com'),
(56, 12, 'Amelia', 'Marie', 'Parker', '555-678-9012', 'amelia.parker@outlook.com'),
(57, 12, 'Aiden', 'Michael', 'Richardson', '555-789-0123',
'aiden.richardson@gmail.com'),
(58, 13, 'Harper', 'Elizabeth', 'Henderson', '555-890-1234',
'harper.henderson@hotmail.com'),
(59, 13, 'Elijah', 'James', 'Coleman', '555-901-2345', 'elijah.coleman@yahoo.com'),
(60, 13, 'Grace', 'Elizabeth', 'Reed', '555-012-3456', 'grace.reed@outlook.com'),
(61, 14, 'Scarlett', 'Marie', 'Russell', '555-123-4567', 'scarlett.russell@gmail.com'),
(62, 14, 'Owen', 'Michael', 'Morgan', '555-234-5678',
'owen.morgan@hotmail.com'),
(63, 14, 'Chloe', 'Marie', 'Peterson', '555-345-6789', 'chloe.peterson@yahoo.com'),
(64, 14, 'Noah', 'Alexander', 'Brooks', '555-456-7890',
'noah.brooks@outlook.com'),
(65, 14, 'Emma', 'Marie', 'Henderson', '555-567-8901',
'emma.henderson@gmail.com'),
(66, 15, 'Liam', 'Thomas', 'Cooper', '555-678-9012', 'liam.cooper@hotmail.com'),
(67, 15, 'Ava', 'Marie', 'Hayes', '555-789-0123', 'ava.hayes@yahoo.com'),
(68, 15, 'Jackson', 'Thomas', 'Simmons', '555-890-1234',
'jackson.simmons@outlook.com'),
(69, 15, 'Sophia', 'Marie', 'Stewart', '555-901-2345', 'sophia.stewart@gmail.com'),
(70, 16, 'Lucas', 'Michael', 'Perry', '555-012-3456', 'lucas.perry@hotmail.com'),
(71, 16, 'Isabella', 'Marie', 'Cox', '555-123-4567', 'isabella.cox@yahoo.com'),
(72, 16, 'Benjamin', 'Thomas', 'Murphy', '555-234-5678',
'benjamin.murphy@outlook.com'),
(73, 16, 'Mia', 'Marie', 'Parker', '555-345-6789', 'mia.parker@gmail.com'),
(74, 17, 'Elijah', 'Thomas', 'Richardson', '555-456-7890',
'elijah.richardson@hotmail.com'),
(75, 17, 'Aria', 'Marie', 'Henderson', '555-567-8901', 'aria.henderson@yahoo.com'),
(76, 17, 'Oliver', 'Thomas', 'Coleman', '555-678-9012',
'oliver.coleman@outlook.com'),
(77, 17, 'Lily', 'Marie', 'Reed', '555-789-0123', 'lily.reed@gmail.com'),
(78, 18, 'James', 'Thomas', 'Russell', '555-890-1234', 'james.russell@hotmail.com'),
(79, 18, 'Grace', 'Marie', 'Morgan', '555-901-2345', 'grace.morgan@yahoo.com'),
```

(80, 18, 'Jackson', 'Thomas', 'Peterson', '555-012-3456',

'jackson.peterson@outlook.com'),

```
(81, 19, 'Sophia', 'Marie', 'Brooks', '555-123-4567', 'sophia.brooks@gmail.com'),
(82, 19, 'Liam', 'Michael', 'Henderson', '555-234-5678',
'liam.henderson@hotmail.com'),
(83, 20, 'Olivia', 'Marie', 'Cooper', '555-345-6789', 'olivia.cooper@yahoo.com'),
(84, 20, 'Noah', 'Marie', 'Hayes', '555-456-7890', 'noah.hayes@outlook.com'),
(85, 21, 'Ava', 'Marie', 'Simmons', '555-567-8901', 'ava.simmons@gmail.com'),
(86, 21, 'Lucas', 'Thomas', 'Stewart', '555-678-9012', 'lucas.stewart@hotmail.com'),
(87, 22, 'Chloe', 'Marie', 'Perry', '555-789-0123', 'chloe.perry@yahoo.com'),
(88, 22, 'Owen', 'Michael', 'Cox', '555-890-1234', 'owen.cox@outlook.com'),
(89, 22, 'Emma', 'Marie', 'Murphy', '555-901-2345', 'emma.murphy@gmail.com');
UPDATE Employees SET job id = emp id;
UPDATE Employees SET dept id = 1 WHERE job id BETWEEN 1 AND 5;
UPDATE Employees SET dept id = 2 WHERE job id BETWEEN 6 AND 10;
UPDATE Employees SET dept id = 3 WHERE job id BETWEEN 11 AND 15;
UPDATE Employees SET dept id = 4 WHERE job id BETWEEN 16 AND 20;
UPDATE Employees SET dept id = 5 WHERE job id BETWEEN 21 AND 25;
UPDATE Employees SET dept id = 6 WHERE job id BETWEEN 26 AND 30;
UPDATE Employees SET dept id = 7 WHERE job id BETWEEN 31 AND 35;
UPDATE Employees SET dept id = 8 WHERE job id BETWEEN 36 AND 40;
UPDATE Employees SET dept id = 9 WHERE job id BETWEEN 41 AND 45;
UPDATE Employees SET dept id = 10 WHERE job id BETWEEN 46 AND 49;
UPDATE Employees SET dept id = 11 WHERE job id BETWEEN 50 AND 53;
UPDATE Employees SET dept id = 12 WHERE job id BETWEEN 54 AND 57;
UPDATE Employees SET dept id = 13 WHERE job id BETWEEN 58 AND 60;
UPDATE Employees SET dept id = 14 WHERE job id BETWEEN 61 AND 65;
UPDATE Employees SET dept id = 15 WHERE job id BETWEEN 66 AND 69;
UPDATE Employees SET dept id = 16 WHERE job id BETWEEN 70 AND 72;
UPDATE Employees SET dept id = 17 WHERE job id BETWEEN 73 AND 77;
UPDATE Employees SET dept id = 18 WHERE job id BETWEEN 78 AND 80;
UPDATE Employees SET dept id = 19 WHERE job id BETWEEN 81 AND 82;
UPDATE Employees SET dept id = 20 WHERE job id BETWEEN 83 AND 84;
UPDATE Employees SET dept id = 21 WHERE job id BETWEEN 85 AND 86;
UPDATE Employees SET dept id = 22 WHERE job id BETWEEN 87 AND 89;
UPDATE Employees SET super id = 1 WHERE dept id = 1 AND job id <> 1;
UPDATE Employees SET super id = 6 WHERE dept id = 2 AND job id <> 6;
```

UPDATE Employees SET super id = 11 WHERE dept id = 3 AND job id \Leftrightarrow 11;

```
UPDATE Employees SET super_id = 16 WHERE dept_id = 4 AND job_id <> 16; UPDATE Employees SET super_id = 21 WHERE dept_id = 5 AND job_id <> 21; UPDATE Employees SET super_id = 26 WHERE dept_id = 6 AND job_id <> 26; UPDATE Employees SET super_id = 31 WHERE dept_id = 7 AND job_id <> 31; UPDATE Employees SET super_id = 36 WHERE dept_id = 8 AND job_id <> 36; UPDATE Employees SET super_id = 41 WHERE dept_id = 9 AND job_id <> 41; UPDATE Employees SET super_id = 46 WHERE dept_id = 10 AND job_id <> 46; UPDATE Employees SET super_id = 50 WHERE dept_id = 11 AND job_id <> 46;
```

UPDATE Employees SET super_id = 50 WHERE dept_id = 11 AND job_id <> 50;

UPDATE Employees SET super_id = 54 WHERE dept_id = 12 AND job_id <> 54;

UPDATE Employees SET super_id = 58 WHERE dept_id = 13 AND job_id <> 58;

UPDATE Employees SET super_id = 61 WHERE dept_id = 14 AND job_id <> 61;

UPDATE Employees SET super_id = 66 WHERE dept_id = 15 AND job_id <> 66;

UPDATE Employees SET super_id = 70 WHERE dept_id = 16 AND job_id <> 70;

UPDATE Employees SET super_id = 73 WHERE dept_id = 17 AND job_id <> 73:

UPDATE Employees SET super_id = 78 WHERE dept_id = 18 AND job_id <> 78;

UPDATE Employees SET super_id = 81 WHERE dept_id = 19 AND job_id <> 81;

UPDATE Employees SET super_id = 83 WHERE dept_id = 20 AND job_id <> 83;

UPDATE Employees SET super_id = 85 WHERE dept_id = 21 AND job_id <> 85;

UPDATE Employees SET super_id = 87 WHERE dept_id = 22 AND job_id <> 87;

7. Value Insertion For 2nd Half:

• Flights:

INSERT INTO flights (depart_airport, depart_time, duration, status, aircraft_type, gate, arr_airport)

VALUES

('Heathrow Airport', '2024-01-10 09:30:00',

SEC_TO_TIME(TIME_TO_SEC('03:45:00')), 'Delayed', 'Airbus A380', 'B3',

'Dubai International Airport');

INSERT INTO flights (depart_airport, depart_time, duration, status, aircraft_type, gate, arr_airport)

VALUES

('Tokyo Haneda Airport', '2024-01-12 15:45:00',

SEC_TO_TIME(TIME_TO_SEC('11:30:00')), 'On Time', 'Boeing 777', 'C7', 'San Francisco International Airport');

INSERT INTO flights (depart_airport, depart_time, duration, status, aircraft_type, gate, arr_airport)

VALUES

('Sydney Kingsford Smith Airport', '2024-01-15 21:00:00',

SEC_TO_TIME(TIME_TO_SEC('08:15:00')), 'On Time', 'Airbus A350', 'A2',

'John F. Kennedy International Airport');

INSERT INTO flights (depart_airport, depart_time, duration, status, aircraft_type, gate, arr_airport)

VALUES

('Changi Airport', '2024-01-18 04:20:00',

SEC_TO_TIME(TIME_TO_SEC('05:30:00')), 'Boarding', 'Boeing 737', 'D5',

'Hong Kong International Airport');

INSERT INTO flights (depart_airport, depart_time, duration, status, aircraft_type, gate, arr_airport)

VALUES

('Los Angeles International Airport', '2024-01-20 18:15:00',

SEC_TO_TIME(TIME_TO_SEC('09:00:00')), 'On Time', 'Airbus A320', 'A4', 'London Gatwick Airport');

• Passengers:

```
INSERT INTO Passengers (first name,
                                             last name, phone number,
                                                                               email,
                                flight id) VALUES
                   baggage,
      carry on,
('Rachel', 'Zane', '123-456-789', 'mrs.ross@yahoo.com', 1, 0, 1),
('Julia', 'Stiles', '123-456-789', 'j.stiles@yahoo.com', 0, 1, 1),
('Samantha', 'Wheeler', '123-456-789', 'wheelersamantha@gmail.com', 0, 1, 2),
('Harvey', 'Specter', '123-456-789', 'harv.specter@outlook.com', 0, 0, 2),
('Donna', 'Paulsen', '123-456-789', 'thedonna@pearson.com', 1, 1, 3),
('Jessica', 'Pearson', '123-456-789', 'j.pearson@pearson.com', 1, 0, 3),
('Sheila', 'Sazs', '123-456-789', 'mrs.litt@outlook.com', 0, 1, 4),
('Mike', 'Ross', '123-456-789', 'michael.ross@hotmail.com', 1, 0, 4),
('Sean', 'Cahill', '123-456-789', 'sean cahill@gmail.com', 0, 1, 5),
('Louis', 'Litt', '123-456-789', 'litt.louis@pearsonspecter.com', 1, 1, 5);
```

• Tickets:

```
INSERT INTO Tickets (pass_id, class, price) VALUES (1, 'Business', 140), (2, 'Economy', 70), (3, 'Business', 150), (4, 'First', 180), (5, 'Economy', 80), (6, 'Premium Economy', 100), (7, 'Business', 150), (8, 'First', 190), (9, 'Premium Economy', 100), (10, 'Economy', 60);
```

UPDATE Passengers set ticket_id = pass_id;

• Baggage:

```
INSERT INTO Baggage (weight, status,pass_id, destination) VALUES (15.0, 'Checked-In', 2, 'Dubai International Airport'), (18.5, 'Lost', 3, 'San Francisco International Airport'), (22.4, 'Arrived', 5, 'John F. Kennedy International Airport'), (12.2, 'In-Transit', 7, 'Hong Kong International Airport'), (14.6, 'Checked-In', 8, 'London Gatwick Airport'),
```

(16.3, 'Checked-In', 9, 'London Gatwick Airport');

UPDATE baggage SET weight_status = 'Overweight' WHERE weight > 18;