```sql
DROP DATABASE IF EXISTS horizon_air;

CREATE DATABASE horizon_air;

USE horizon_air;

-- 1
CREATE TABLE maskapai (
    ID CHAR(6) NOT NULL,
    Nama VARCHAR(255) NOT NULL,
    Negara_asal VARCHAR(255) NOT NULL,
    PRIMARY KEY (ID)
);

CREATE TABLE pesawat (
    ID CHAR(6) NOT NULL,
    Model VARCHAR(255) NOT NULL,
    Kapasitas INT NOT NULL,
    Tahun_produksi CHAR(4) NOT NULL,
    Status_pesawat VARCHAR(50) NOT NULL,
    Maskapai_ID CHAR(6) NOT NULL,
    PRIMARY KEY (ID),
    FOREIGN KEY (Maskapai_ID) REFERENCES maskapai (ID) ON DELETE CASCADE ON UPDATE CASCADE
);

CREATE TABLE bandara (
    ID INT NOT NULL,
    Nama VARCHAR(256) NOT NULL,
    Kota VARCHAR(256) NOT NULL,
    Negara VARCHAR(256) NOT NULL,
```

```sql
    Kode_IATA VARCHAR(3) NOT NULL,

    PRIMARY KEY (ID)
);


CREATE TABLE penerbangan (

    ID CHAR(6) NOT NULL,

    Waktu_keberangkatan DATETIME NOT NULL,

    Waktu_sampai DATETIME NOT NULL,

    Status_penerbangan VARCHAR(50) NOT NULL,

    Pesawat_ID CHAR(6) NOT NULL,

    PRIMARY KEY (ID),

    FOREIGN KEY (Pesawat_ID) REFERENCES pesawat (ID) ON DELETE CASCADE ON UPDATE CASCADE
);


CREATE TABLE bandara_penerbangan (

    Bandara_ID INT NOT NULL,

    Penerbangan_ID CHAR(6) NOT NULL,

    PRIMARY KEY (Bandara_ID, Penerbangan_ID),

    FOREIGN KEY (Bandara_ID) REFERENCES bandara (ID) ON DELETE CASCADE ON UPDATE CASCADE,

    FOREIGN KEY (Penerbangan_ID) REFERENCES penerbangan (ID) ON DELETE CASCADE ON UPDATE
CASCADE
);


CREATE TABLE bagasi (

    ID INT NOT NULL,

    Berat INT NOT NULL,

    Ukuran VARCHAR(5) NOT NULL,

    Warna VARCHAR(255) NOT NULL,

    Jenis VARCHAR(255) NOT NULL,

    PRIMARY KEY (ID)
);
```

```sql
CREATE TABLE penumpang (

    NIK CHAR(16) NOT NULL,

    Nama VARCHAR(255) NOT NULL,

    Tanggal_lahir DATE NOT NULL,

    Alamat VARCHAR(255) NOT NULL,

    No_telepon VARCHAR(13) NOT NULL,

    Jenis_kelamin VARCHAR(1) NOT NULL,

    Kewarganegaraan VARCHAR(255) NOT NULL,

    Bagasi_ID INT NOT NULL,

    PRIMARY KEY (NIK),

    FOREIGN KEY (Bagasi_ID) REFERENCES bagasi (ID) ON DELETE CASCADE ON UPDATE CASCADE
);


CREATE TABLE tiket (

    ID CHAR(6) NOT NULL,

    Nomor_kursi CHAR(3) NOT NULL,

    Harga INT NOT NULL,

    Waktu_pembelian DATETIME NOT NULL,

    Kelas_penerbangan VARCHAR(50) NOT NULL,

    Penumpang_NIK CHAR(16) NOT NULL,

    Penerbangan_ID CHAR(6) NOT NULL,

    PRIMARY KEY (ID),

    FOREIGN KEY (Penumpang_NIK) REFERENCES penumpang (NIK) ON DELETE CASCADE ON UPDATE
CASCADE,

    FOREIGN KEY (Penerbangan_ID) REFERENCES penerbangan (ID) ON DELETE CASCADE ON UPDATE
CASCADE
);


-- 2

INSERT INTO

    bandara (
```

```sql
        ID,
        Nama,
        Kota,
        Negara,
        Kode_IATA
    )
VALUES (
        1,
        'Soekarno-Hatta',
        'Jakarta',
        'Indonesia',
        'CGK'
    ),
    (
        2,
        'Ngurah Rai',
        'Denpasar',
        'Indonesia',
        'DPS'
    ),
    (
        3,
        'Changi',
        'Singapore',
        'Singapore',
        'SIN'
    ),
    (
        4,
        'Haneda',
        'Tokyo',
```

```sql
        'Japan',

        'HND'

    );


INSERT INTO

    bagasi (

        ID,

        Berat,

        Ukuran,

        Warna,

        Jenis

    )
VALUES (1, 20, 'M', 'Hitam', 'Koper'),

    (2, 15, 'S', 'Merah', 'Ransel'),

    (3, 25, 'L', 'Biru', 'Koper'),

    (4, 10, 'S', 'Hijau', 'Ransel');


INSERT INTO

    maskapai (ID, Nama, Negara_asal)
VALUES (

        'GA123',

        'Garuda Indonesia',

        'Indonesia'

    ),

    (

        'SQ456',

        'Singapore Airlines',

        'Singapore'

    ),

    (

        'JL789',
```

```sql
        'Japan Airlines',

        'Japan'

    ),

    (

        'QZ987',

        'Air Asia',

        'Malaysia'

    );


INSERT INTO

    penumpang (

        NIK,

        Nama,

        Tanggal_lahir,

        Alamat,

        No_telepon,

        Jenis_kelamin,

        Kewarganegaraan,

        Bagasi_ID

    )

VALUES (

        '3201123456789012',

        'Budi Santoso',

        '1990-04-15',

        'Jl. Merdeka No. 1',

        '081234567890',

        'L',

        'Indonesia',

        1

    ),

    (
```

```
        '3301234567890123',

        'Siti Aminah',

        '1985-08-20',

        'Jl. Kebangsaan No. 2',

        '081298765432',

        'P',

        'Indonesia',

        2

    ),

    (

        '340314567890123',

        'John Tanaka',

        '1992-12-05',

        'Shibuya Tokyo',

        '080123456789',

        'L',

        'Japan',

        3

    ),

    (

        '3504156789012345',

        'Li Wei',

        '1995-03-01',

        'Orchard Rd, Singapore',

        '065812345678',

        'L',

        'Singapore',

        4

    );


INSERT INTO
```

```
    pesawat (
        ID,
        Model,
        Kapasitas,
        Tahun_produksi,
        Status_pesawat,
        Maskapai_ID
    )
VALUES (
        'PKABC1',
        'Boeing 737',
        180,
        '2018',
        'Aktif',
        'GA123'
    ),
    (
        'PKDEF2',
        'Airbus A320',
        150,
        '2020',
        'Aktif',
        'SQ456'
    ),
    (
        'PKGHI3',
        'Boeing',
        250,
        '2019',
        'Dalam perawatan',
        'JL789'
```

```sql
    ),
    (
        'PKJKL4',
        'Airbus A330',
        280,
        '2021',
        'Aktif',
        'QZ987'
    );


INSERT INTO
    penerbangan (
        ID,
        Waktu_keberangkatan,
        Waktu_sampai,
        Status_penerbangan,
        Pesawat_ID
    )
VALUES (
        'FL0001',
        '2024-12-15 10:00:00',
        '2024-12-15 12:30:00',
        'Jadwal',
        'PKABC1'
    ),
    (
        'FL0002',
        '2024-12-16 08:00:00',
        '2024-12-16 10:45:00',
        'Jadwal',
        'PKDEF2'
```

```sql
        ),
        (
            'FL0003',
            '2024-12-17 14:00:00',
            '2024-12-17 16:30:00',
            'Ditunda',
            'PKGHI3'
        ),
        (
            'FL0004',
            '2024-12-18 18:00:00',
            '2024-12-18 20:30:00',
            'Jadwal',
            'PKJKL4'
        );


INSERT INTO
    bandara_penerbangan (Bandara_ID, Penerbangan_ID)
VALUES (1, 'FL0001'),
    (2, 'FL0002'),
    (3, 'FL0003'),
    (4, 'FL0004');


INSERT INTO
    tiket (
        ID,
        Nomor_kursi,
        Harga,
        Waktu_pembelian,
        Kelas_penerbangan,
        Penumpang_NIK,
```

```sql
        Penerbangan_ID
    )
VALUES (
        'TK0001',
        '12A',
        1200000,
        '2024-11-01 08:00:00',
        'Ekonomi',
        '3201123456789012',
        'FL0001'
    ),
    (
        'TK0002',
        '14B',
        1500000,
        '2024-11-02 09:30:00',
        'Bisnis',
        '3301234567890123',
        'FL0002'
    ),
    (
        'TK0003',
        '16C',
        2000000,
        '2024-11-03 10:15:00',
        'Ekonomi',
        '340314567890123',
        'FL0003'
    ),
    (
        'TK0004',
```

```sql
    '18D',

    1000000,

    '2024-11-04 11:45:00',

    'Ekonomi',

    '3504156789012345',

    'FL0004'

);


-- 3

ALTER TABLE penumpang ADD Email VARCHAR(255) NOT NULL;


-- 4

ALTER TABLE bagasi MODIFY jenis VARCHAR(50) NOT NULL;


-- 5

ALTER TABLE bandara

DROP PRIMARY KEY,

ADD PRIMARY KEY (ID, Kode_IATA);


-- 6

ALTER TABLE penumpang DROP COLUMN Email;


-- 7

UPDATE penerbangan

SET

    `Waktu_keberangkatan` = '2024-12-15 11:00:00',

    `Waktu_sampai` = '2024-12-15 13:30:00'

WHERE

    ID = 'FL0001';


-- 8
```

```sql
UPDATE penumpang
SET
  `No_telepon` = '081223344556'
WHERE
  NIK = '3301234567890123';


-- 9
UPDATE pesawat SET `Status_pesawat` = 'Aktif' WHERE ID = 'PKGHI3';


-- 10
DELETE FROM tiket WHERE `Penumpang_NIK` = '3504156789012345';


-- 11
DELETE FROM bagasi WHERE `ID` = 2;


-- 12
DELETE FROM penerbangan WHERE `Status_penerbangan` = 'Ditunda';
```