Assignment 3
~~Software~~ Engineering

a.) Display a list of all flights, airline sorted alphabetically

```
SELECT  flight_number, Airline
FROM    FLIGHT
ORDER BY Airline; -- Sorted by ascending by default
```

b) For the fares with amount over $50, display the restrictions, and amount after taxes (15%)

```
SELECT  Restrictions, Amount * AS Amounter_after_taxes
FROM    FARE
WHERE   Amount > 50;
```

c) ~~Dele~~ Delete 5% from the records in SEAT_Reservation
```
UPDATE   SEAT_RESERVATION
SET      Seat_number = Seat_number * 0.95;
```

d) For each AIRPLANE_TYPE, display a list of Airline_type_name and the number of seats the airplane has

```
SELECT  Airplane_type_name, Max_seats
FROM    AIRPLANE_TYPE
GROUP BY Airplane_type_name;
```

e) Retrieve the name of airplane type who name starts with E and ends with T

```sql
SELECT   Airplane_type_name
FROM     AIRPLANE_TYPE
WHERE    Airplane_type_name LIKE 'E%T';
```

f)
```sql
SELECT FLIGHT. Flight_number,
       Departure_airport.Name AS Departure_airport_name,
       Arrival_airport.Name AS Arrival_airport_name,
       FLIGHT_LEG. Scheduled_departure_time,
       FLIGHT_LEG. Scheduled_arrival_time,
       AIRPLANE_TYPE. Airplane_type_name
FROM FLIGHT
JOIN FLIGHT_LEG ON FLIGHT.Flight_number = FLIGHT_LEG.Flight_number
JOIN AIRPLANE ON FLIGHT_LEG.Flight_number = AIRPLANE. Airplane_Id
JOIN AIRPLANE_TYPE ON AIRPLANE.Airplane_type = AIRPLANE_TYPE. Airplane_type_name
JOIN AIRPORT AS Departure_airport ON FLIGHT_LEG.Departure_airport_code = Departure_airport.Airport_code
JOIN AIRPORT AS Arrival_airport ON FLIGHT_LEG.Arrival_airport_code = Arrival_airport.Airport_code
WHERE FLIGHT.Weekdays = 'Monday';
```

e) Retrieve the name of airplane type who
name starts with E and ends with T

```sql
SELECT  Airplane_type_name
FROM    AIRPLANE_TYPE
WHERE   Airplane_type_name LIKE 'E%T';
```

f)
```sql
SELECT FLIGHT. Flight_number,
       Departure_airport. Name AS Departure_airport_name,
       Arrival_airport. Name AS Arrival_airport_name,
       FLIGHT_LEG. Scheduled_departure_time,
       FLIGHT_LEG. Scheduled_arrival_time,
       AIRPLANE_TYPE. ~~AIRLAN~~ Airplane_type_name
FROM FLIGHT
JOIN FLIGHT_LEG ON FLIGHT. Flight_number = FLIGHT_LEG.
                                           Flight_number ~~FLIGHT~~
JOIN AIRPLANE ON FLIGHT_LEG. flight_number = AIRPLANE.
                                             Airplane_id
JOIN AIRPLANE_TYPE ON AIRPLANE. Airplane_type = AIRPLANE_TYPE.
                                                Airplane_type_name
JOIN AIRPORT AS Departure_airport ON FLIGHT. LEG. Departure_airport_code
                                     = Departure_airport. Airport_code
JOIN AIRPORT AS Arrival_airport ON FLIGHT_LEG. Arrival_airport_code =
                                   Arrival_airport. Airport_code
WHERE FLIGHT. Weekdays = 'Monday';
```

```sql
5) SELECT FLIGHT.Flight_number,
        FLIGHT.Airline AS Airline_name,
        Departure_airport.Name AS Departure_airport_name,
        Arrival_airport.Name AS Arrival_airport_name,
        FLIGHT_LEG.Shceduled_departure_time,
        FLIGHT_LEG.Scheduled_arrival_time
   FROM FLIGHT
   JOIN FLIGHT_LEG ON FLIGHT.Flight_number = FLIGHT_LEG.
                                            Flight_number
   JOIN AIRPORT AS Departure_airport ON FLIGHT_LEG.Departure_
                                                   airport_code
                        = Departure_airport.Airport_code
   JOIN AIRPORT AS Arrival_airport ON FLIGHT_LEG.Arrival_airport_code =
                        Arrival_airport.Airport_code
   WHERE FLIGHT.Airline LIKE '%AIR%';
```