Directions: Write SQL statements for the following queries related to the Seattle Flights database. Do **NOT** actually list the results, **ONLY** the SQL statement that would produce the correct results.

1. List all flights (carrier and flight number) with destination `CLT` (Charlotte, North Carolina).

   Solution:

   ```sql
   SELECT carrier, flight FROM Flights WHERE dest = 'CLT';
   ```

2. List all flights whose arrival were delayed at least 30 minutes. **Solution**:

   ```sql
   SELECT carrier, flight FROM Flights WHERE arr_delay >= 30;
   ```

3. List month, day, time, and flight with on-time departures. Sort by month, then day.

   Solution:

   ```sql
   SELECT month, day, dep_time, flight FROM Flights WHERE dep_delay <= 0 ORDER BY
       month, day;
   ```

4. Determine flights that arrived late but left early.

   Solution:

   ```sql
   SELECT carrier, flight FROM Flights WHERE arr_delay > 0 AND dep_delay < 0;
   ```

5. Find flights to all cities except `CLT`, `DFW`, and `ERW`. Limit your results to 500.

   Solution:

   ```sql
   SELECT carrier, flight FROM Flights WHERE dest NOT IN ('CLT', 'DFW', 'ERW')
      LIMIT 500;
   ```

6. Which carriers departed later than 30 minutes and arrived later than 30 minutes?

   Solution:

   ```sql
   SELECT carrier FROM Flights WHERE dep_delay > 30 AND arr_delay > 30;
   ```

7. Which carriers departed later than 45 minutes or arrived later than 30 minutes?

   Solution:

```sql
SELECT carrier FROM Flights WHERE dep_delay > 45 OR arr_delay > 30;
```

8. Which planes fly to San Francisco? Use (`distinct`). Rename the output field `Plane`.

   Solution:

```sql
SELECT distinct(tailnum) AS 'Plane' FROM Flights WHERE dest = 'SFO';
```

9. Identify flights whose total distance starts with a 2 (e.g., 215, 2260) or has a 7 in the second digit (e.g., 679).

   Solution:

```sql
SELECT carrier, flight FROM Flights WHERE distance LIKE '2%' OR distance LIKE
    '_7%';
```

10. Find flight information (carrier, flight, time) for all flights to either airport in Chicago (`ORD`, `MDW`) on Christmas eve (December 24th) leaving in the afternoon.

    Solution:

```sql
SELECT carrier, flight, dep_time FROM Flights WHERE dest IN ('ORD','MDW') AND
    month = 12 AND day = 24 AND dep_time BETWEEN 1300 AND 1800;
```