Data Summary

The data for the problem statement has seven tables in the following manner:

1. **drivers_table:** The driver details table contains information about truck drivers involved across nine fields.
    1.1. 'driver_id': unique identification for each driver
    1.2. 'name': name of the truck driver
    1.3. 'gender': gender of the truck driver
    1.4. 'age': age of the truck driver
    1.5. 'experience': experience of the truck driver in years
    1.6. 'driving_style': driving style of the truck driver, conservative or proactive
    1.7. 'ratings': average rating of the truck driver on the scale of 1 to 10
    1.8. 'vehicle_no': the number of the driver's truck
    1.9. 'average_speed_mph': average speed the truck driver in miles per hour

2. **trucks_table:** The truck details table contains information about trucks involved across five fields.
    2.1. 'truck_id': the unique identification number of the truck
    2.2. 'truck_age': age of the truck in years
    2.3. 'load_capacity_pounds': loading capacity of the truck in years
    2.4. 'mileage_mpg': mileage of the truck in miles per gallon
    2.5. 'fuel_type': fuel type of the truck

3. **routes_table:** The route details table contains information for different routes followed by the trucks
    3.1. 'route_id': the unique identifier of the routes
    3.2. 'origin_id': the city identification number for the origin city
    3.3. 'destination_id': the city identification number for the destination
    3.4. 'distance': the distance between the origin and destination cities in miles
    3.5. 'average_hours': average time needed to travel from the origin to the destination in hours

4. **traffic_data:** The traffic data table contains information for traffic on all the routes on an hourly basis.
    4.1. 'route_id': the identification number of the route
    4.2. 'date': date of the traffic observation
    4.3. 'hour': the hour of the observation as a number in 24-hour format
    4.4. 'no_of_vehicles': the number of vehicles observed on the route
    4.5. 'accident': binary variable to denote if an accident was observed

5. **truck_schedule_table:** The truck schedule data contains historical information of the trucks scheduled and if arrival was delayed.
    5.1. 'truck_id': the unique identifier of the truck
    5.2. 'route_id': the unique identifier of the route
    5.3. 'departure_date': departure DateTime of the truck
    5.4. 'estimated_arrival': estimated arrival DateTime of the truck
    5.5. 'delay': binary variable if the truck's arrival was delayed, 0 for on-time arrival and 1 for delayed arrival

6. **city_weather:** The city weather data contains historical information on the weather precipitation conditions.
    6.1. 'city_id': the unique identifier of the city
    6.2. 'date': date of the observation
    6.3. 'hour': the hour of the observation as a number in 24-hour format
    6.4. 'temp(°F)': temperature in Fahrenheit
    6.5. 'wind_speed': wind speed in miles per hour
    6.6. 'description': description of the weather conditions such as Clear, Cloudy, etc
    6.7. 'precip': precipitation in inches
    6.8. 'humidity': humidity observed
    6.9. 'visibility': visibility observed in miles per hour
    6.10. 'pressure': pressure observed in millibar
    6.11. 'chanceofrain': chances of rain
    6.12. 'chanceoffog': chances of fog
    6.13. 'chanceofsnow': chances of snow
    6.14. 'chanceofthunder': chances of thunder

7. **routes_weather:** The routes weather data contains historical information on the weather precipitation conditions on different routes followed by trucks.
    7.1. route_id: A unique identifier for the route
    7.2. date: The date and time of the observation
    7.3. 'temp(°F)': temperature in Fahrenheit
    7.4. 'wind_speed': wind speed in miles per hour
    7.5. 'description': description of the weather conditions such as Clear, Cloudy, etc
    7.6. 'precip': precipitation in inches
    7.7. 'humidity': humidity observed
    7.8. 'visibility': visibility observed in miles per hour
    7.9. 'pressure': pressure observed in millibar
    7.10. 'chanceofrain': chances of rain
    7.11. 'chanceoffog': chances of fog
    7.12. 'chanceofsnow': chances of snow
    7.13. 'chanceofthunder': chances of thunder