

SAFETYNET Query Applications

Practice Exercises

Pick one or more of the following to practice writing queries (or another application of your choice). Discuss with the others at your table. Flip past this first page to see some possible solutions for each challenge.

Crash Module

1. Identify which crash records were last edited by a specific user in a specific time period.
2. Identify any records for a certain time period where the "HM Cargo Released" field is blank.
3. Find any interstate or intrastate carrier records where the DOT# is blank.
4. Identify all the records that are marked a size and weight for a certain time period
5. Identify Class 6 and Class 8-11 vehicles in your crash data that could have an incorrect GVWR listed for 2019. Hint: All "vehicle configurations" with a value of 6 or 8-11 should have a GVWR>26000 lbs., meaning that in the record, GVWR should be equal to "3."
6. Search for records where the driver's license is blank.
7. Locally defined fields practice. Query to find out which crash records were driverless because:
 - a. Parked vehicle
 - b. Stolen vehicle
 - c. Hit and run

Inspection Module

1. Query inspections by vehicle type and inspection level
2. Query inspections by inspector code and inspection level
3. Identify how many drivers or vehicles were put out of service ("Driver OOS" or "Vehicle OOS")
 - a. In a certain time period
 - b. By inspector code
4. Look for specific violations
 - a. In a certain time period
 - b. By level of inspection
5. Identify all of the records that occurred in a certain area (e.g. county, road (hint: use wildcard), between mileposts, etc.)
6. What queries could you write that would help pull certification numbers for officers?
 - a. States differ, but they all have certain requirements for officers to maintain certification; i.e., they need to perform a certain number of inspections per year, such as __ bus inspections, __ level 1 or 5 inspections, or __ cargo tank inspections, etc.).
7. Locally defined fields practice. Query to find out which inspection records:
 - a. Had a duty status of "OT"
 - b. Were "CDL checked"

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Answers to Practice Exercise Questions

Crash Module

- 1. Identify which crash records were last edited by a specific user in a specific time period.**
 - a. Last Edit Date \geq ____ AND
 - b. Last Edit Date \leq ____ AND
 - c. Last Edit UserID = ____ (e.g. SNETADMIN)
- 2. Identify any records for a certain time period where the "Driver License #" field is blank.**
 - a. Last Edit Date \geq ____ AND
 - b. Last Edit Date \leq ____ AND
 - c. Driver Lic. # Is blank
- 3. Find any interstate or intrastate carrier records where the DOT# is blank.**
 - a. Crash Date \geq ____ AND
 - b. Crash Date \leq ____ AND
 - c. USDOT # Is blank AND
 - d. (Interstate = Interstate OR
 - e. Interstate = Intrastate)
- 4. Identify all the records that are marked a size and weight for a certain time period.**
 - a. Crash Date \geq ____ AND
 - b. Crash Date \leq ____ AND
 - c. GVWR = ____ AND
 - d. Vehicle Configuration = ____
- 5. Identify Class 6 and Class 8-11 vehicles in your crash data that could have an incorrect GVWR listed for 2019.**
 - a. Crash Date \geq 1/01/2019 AND
 - b. Crash Date \leq 12/31/2019 AND
 - c. GVWR $<>$ 3 - Greater than 26,000 lb AND
 - d. (Vehicle Configuration = 6 - Single Unit Truck (3 or more axles) OR
 - e. Vehicle Configuration = 8 - Truck Tractor (bobtail) OR
 - f. Vehicle Configuration = 9 - Tractor/Semitrailer OR
 - g. Vehicle Configuration = 10 - Tractor/Double OR
 - h. Vehicle Configuration = 11 - Tractor/Triple)
- 6. Locally defined fields practice. Query to find out which crash records were driverless because:**
 - a. Parked vehicle**
 - i. Optional Field Description = Driverless - Parked AND
 - ii. Optional Value = 1

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b. Stolen vehicle

- i. Optional Field Description = Driverless – Stolen AND
- ii. Optional Value = 1

c. Hit and run

- i. Optional Field Description = Driverless – Hit and Run AND
- ii. Optional Value = 1

Inspection Module

1. Query inspections by vehicle type and inspection level

- a. Start Date >= ____ AND
- b. Start Date <= ____ AND
- c. Vehicle Type = ____ AND
- d. Insp. Level = ____

2. Query inspections by inspector code and inspection level

- a. Start Date >= ____ AND
- b. Start Date <= ____ AND
- c. Inspector Code = ____ AND
- d. Insp. Level = ____

3. Identify how many drivers or vehicles were put out of service (“Driver OOS” or “Vehicle OOS”)

- a. In a certain time period
- b. By inspector code
 - i. (Driver OOS = Yes OR
 - ii. Vehicle OOS = Yes) AND
 - iii. Start Date >= ____ AND
 - iv. Start Date <= ____ AND
 - v. Inspector Code = ____

4. Look for specific violations

- a. In a certain time period
- b. By level of inspection
 - i. Federal Violation = ____ (*alternatively, use “like” instead of “=” to get multiple violation subtypes within a single type*)
 - ii. Start Date >= ____ AND
 - iii. Start Date <= ____ AND
 - iv. Insp. Level = ____



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5. **Identify all of the records that occurred in a certain area (e.g. county, road (hint: use wildcard), between mileposts, etc.)**
 - a. Start Date \geq _____ AND
 - b. Start Date \leq _____ AND
 - c. Milepost \geq ____ AND
 - d. Milepost \leq ____ AND
 - e. Location Description Like ____ (e.g. SR-9)
 - f. County Code - FIPS = ____
6. **What queries could you write that would help pull certification numbers for officers?** States differ, but they all have certain requirements for officers to maintain certification; i.e., they need to perform a certain number of inspections per year, such as __ bus inspections, __ level 1 or 5 inspections, etc.).
 - a. Start Date \geq _____ AND
 - b. Start Date \leq _____ AND
 - c. Inspector Code = _____ AND
 - d. Insp. Level = _____
 - e. Truck/Bus = _____
7. **Locally defined fields practice. Query to find out which inspection records:**
 - a. **Had a duty status of "OT"**
 - i. Optional Field Description = DUTY STATUS: AND
 - ii. Optional Value = OT
 - b. **Were "CDL checked"**
 - i. Optional Field Description = CDL Checked AND
 - ii. Optional Value = 1