

PSEUDOCODE

START

Define a function to validate date input

Loop until a valid day, month, and year are entered

Prompt the user for day, validate between 1 and 31

Prompt the user for month, validate between 1 and 12

Prompt the user for year, validate between 2000 and 2024

Combine day, month, and year into a formatted date string

Return the validated date

Define a function to validate "continue" input

Prompt the user with a yes/no question

Loop until a valid input (Y/N) is received

Return True if 'y', False if 'n'

Define the main processing function

Validate date input

If date is not valid, return

Define file paths for three dates

Match the validated date with corresponding file

If no file matches, print error and return

Open the matched file

Initialize counters for various statistics

Iterate over rows in the file

Increment the total vehicle count

Check for specific vehicle types (e.g., trucks, electric vehicles, two-wheelers)

Count busses heading north from a specific junction

Count vehicles traveling straight (no turn)

Calculate percentage of trucks

Calculate average bicycles per hour

Count vehicles over the speed limit

Count vehicles passing through specific junctions

Calculate percentage of scooters through a junction

Determine busiest hour for a specific junction

Count hours with rain

Compile results into a list

Return the results

Define a function to display outcomes

Print formatted results from the output list

Define a function to save results to a text file

Open file in append mode

Write formatted results to the file

Main loop

Call the processing function

Display the results

Save the results to a file

Check if the user wants to process another file

If no, exit loop

END