

OUTPUT LOGS WITH IMAGES:

LOG:

Enter the number of groups: 5

Enter the number of vehicles in group 1: 10

Enter the probability of vehicles going northbound in group 1 (0.0 to 1.0): 1

Enter the delay time for group 1 in seconds: 10

Enter the number of vehicles in group 2: 10

Enter the probability of vehicles going northbound in group 2 (0.0 to 1.0): 1

Enter the delay time for group 2 in seconds: 3

Enter the number of vehicles in group 3: 15

Enter the probability of vehicles going northbound in group 3 (0.0 to 1.0): .6

Enter the delay time for group 3 in seconds: 3

Enter the number of vehicles in group 4: 20

Enter the probability of vehicles going northbound in group 4 (0.0 to 1.0): .8

Enter the delay time for group 4 in seconds: 10

Enter the number of vehicles in group 5: 15

Enter the probability of vehicles going northbound in group 5 (0.0 to 1.0): .7

Enter the delay time for group 5 in seconds: 3

The screenshot shows a Mac OS X desktop with the Dock at the bottom. The application window is a terminal session for the file `trafficSystem.c`. The terminal output shows the program's execution:

```
trafficSystem.c - TrafficSystemMultithreadingProject
(base) aym@Abdihmans-MacBook-Pro-3:~/TrafficSystemMultithreadingProject% ./trafficSystem
Enter the number of groups: 5
Enter the number of vehicles in group 1: 10
Enter the probability of vehicles going northbound in group 1 (0.0 to 1.0): 1
Enter the delay time for group 1 in seconds: 10
Enter the number of vehicles in group 2: 10
Enter the probability of vehicles going northbound in group 2 (0.0 to 1.0): 1
Enter the delay time for group 2 in seconds: 3
Enter the number of vehicles in group 3: 15
Enter the probability of vehicles going northbound in group 3 (0.0 to 1.0): .6
Enter the delay time for group 3 in seconds: 3
Enter the number of vehicles in group 4: 20
Enter the probability of vehicles going northbound in group 4 (0.0 to 1.0): .8
Enter the delay time for group 4 in seconds: 10
Enter the number of vehicles in group 5: 15
Enter the probability of vehicles going northbound in group 5 (0.0 to 1.0): .7
Enter the delay time for group 5 in seconds: 3

Current Queue Status:
-----
Northbound Queue Size: 1
Southbound Queue Size: 0
-----
Vehicle #1 is now crossing the bridge.

Current Queue Status:
-----
Northbound Queue Size: 2
```

Sat Jul 29 9:30 PM

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS TRAFFICSYSTEMMULTIT... **trafficSystem.c** trafficSystem

```
C trafficSystem.c >...
240     printf("ENTER THE DELAY TIME FOR GROUP %d IN SECONDS: ", i + 1);
241     scanf("%d", &(*delayTimes)[i]);
242 }
243 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Vehicle #3 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 1
Southbound Queue Size: 0

Vehicle #4 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 1
Southbound Queue Size: 0

Vehicle #10 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 1
Southbound Queue Size: 0

Vehicle #8 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Ln 6, Col 1 Spaces: 4 UTF-8 LF ⌂ C Mac ⌘ ⌘ ⌘

Quiz Eleven (1).docx Quiz Eleven.docx

master* 0 0 △ 0

This screenshot shows a terminal window in VS Code displaying the execution of a C program named trafficSystem.c. The program simulates a traffic system where vehicles cross a bridge. It prints messages indicating when each vehicle starts crossing and its current queue status. In this run, vehicles #3, #4, #8, and #10 are shown crossing at different times, with their respective Northbound and Southbound queue sizes being tracked. The interface includes standard VS Code navigation and status bars.

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trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS TRAFFICSYSTEMMULTIT... **trafficSystem.c** trafficSystem

```
C trafficSystem.c >...
240     printf("ENTER THE DELAY TIME FOR GROUP %d IN SECONDS: ", i + 1);
241     scanf("%d", &(*delayTimes)[i]);
242 }
243 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Vehicle #1 exited the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

Northbound Queue Size: 1
Southbound Queue Size: 0

Current Queue Status:

Northbound Queue Size: 1
Southbound Queue Size: 0

Vehicle #3 exited the bridge.

Current Queue Status:

Northbound Queue Size: 1
Southbound Queue Size: 0

Vehicle #6 is now crossing the bridge.

Ln 6, Col 1 Spaces: 4 UTF-8 LF ⌂ C Mac ⌘ ⌘ ⌘

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master* 0 0 △ 0

This screenshot shows a terminal window in VS Code displaying the execution of the same C program. In this run, vehicles exit the bridge sequentially. Vehicle #1 exits first, followed by #3, and then #6 begins crossing. The program's output shows the current queue status for both Northbound and Southbound directions at various points. The interface is identical to the first screenshot, showing the VS Code environment and its toolbars.

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trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS TRAFFICSYSTEMMULTIT... **trafficSystem.c** trafficSystem

```
C trafficSystem.c >...
240     printf("ENTER THE DELAY TIME FOR GROUP %d IN SECONDS: ", i + 1);
241     scanf("%d", &(*delayTimes)[i]);
242 }
243 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Vehicle #6 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 1
Southbound Queue Size: 0

Vehicle #9 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #4 exited the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

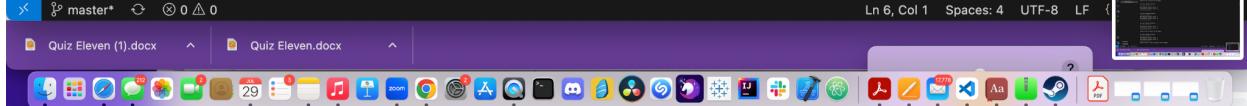
Current Queue Status:

Northbound Queue Size: 3
Southbound Queue Size: 0

Vehicle #2 is now crossing the bridge.

Ln 6, Col 1 Spaces: 4 UTF-8 LF

master* Quiz Eleven (1).docx Quiz Eleven.docx



Sat Jul 29 9:30 PM

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS TRAFFICSYSTEMMULTIT... **trafficSystem.c** trafficSystem

```
C trafficSystem.c >...
240     printf("ENTER THE DELAY TIME FOR GROUP %d IN SECONDS: ", i + 1);
241     scanf("%d", &(*delayTimes)[i]);
242 }
243 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Northbound Queue Size: 2
Southbound Queue Size: 0

Vehicle #7 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 1
Southbound Queue Size: 0

Vehicle #5 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #10 exited the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Ln 6, Col 1 Spaces: 4 UTF-8 LF

master* Quiz Eleven (1).docx Quiz Eleven.docx



The screenshot shows a Mac OS X desktop with VS Code open. The title bar reads "trafficSystem.c — TrafficSystemMultithreadingProject". The left sidebar has icons for Explorer, Open Editors, Terminal, and others. The "OPEN EDITORS" section shows "trafficSystem.c" (active) and "trafficSystem". The "TERMINAL" tab is selected, displaying the output of the program:

```
Current Queue Status:  
-----  
Northbound Queue Size: 0  
Southbound Queue Size: 0  
  
Vehicle #8 exited the bridge.  
  
Current Queue Status:  
-----  
Northbound Queue Size: 0  
Southbound Queue Size: 0  
  
Current Queue Status:  
-----  
Northbound Queue Size: 0  
Southbound Queue Size: 0  
  
Vehicle #6 exited the bridge.  
  
Current Queue Status:  
-----  
Northbound Queue Size: 0  
Southbound Queue Size: 0  
  
Current Queue Status:  
-----
```

The status bar at the bottom shows "Ln 6, Col 1 Spaces: 4 UTF-8 LF". A floating terminal window is visible in the bottom right corner.

The screenshot shows a macOS desktop environment with a terminal window open. The terminal window title is "trafficSystem.c - TrafficSystemMultithreadingProject". The window displays the following C code:

```
trafficSystem.c >...  
240     printf("Enter the delay time for group %d in seconds: ", i+1);  
241     scanf("%d", &(*delayTimes)[i]);  
242 }  
243 }
```

Below the code, the terminal output shows the current queue status and vehicle movements:

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Current Queue Status:
Northbound Queue Size: 2
Southbound Queue Size: 0

Vehicle #13 is now crossing the bridge.

Current Queue Status:
Northbound Queue Size: 1
Southbound Queue Size: 0

Vehicle #20 is now crossing the bridge.

Current Queue Status:
Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #15 exited the bridge.

Current Queue Status:
Northbound Queue Size: 0
Southbound Queue Size: 0

At the bottom of the terminal window, the status bar indicates "Ln 6, Col 1 Spaces: 4 UTF-8 LF { } C Mac".

The left sidebar of the terminal window shows the file tree with "trafficSystem.c" selected. The top of the screen shows the macOS menu bar with "Code", "File", "Edit", "Selection", "View", "Go", "Run", "Terminal", "Window", and "Help". The top right corner shows the date and time "Sat Jul 29 9:33 PM".

Sat Jul 29 9:33 PM

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS TRAFFICSYSTEMMULTIT... PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL zsh + ...

C trafficSystem.c > trafficSystem.c trafficSystem

```
440     printf("ENTER THE DELAY TIME FOR GROUP %d IN SECONDS: ", i+1);
241     scanf("%d", &(*delayTimes)[i]);
242 }
243 }
```

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #15 exited the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #17 exited the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

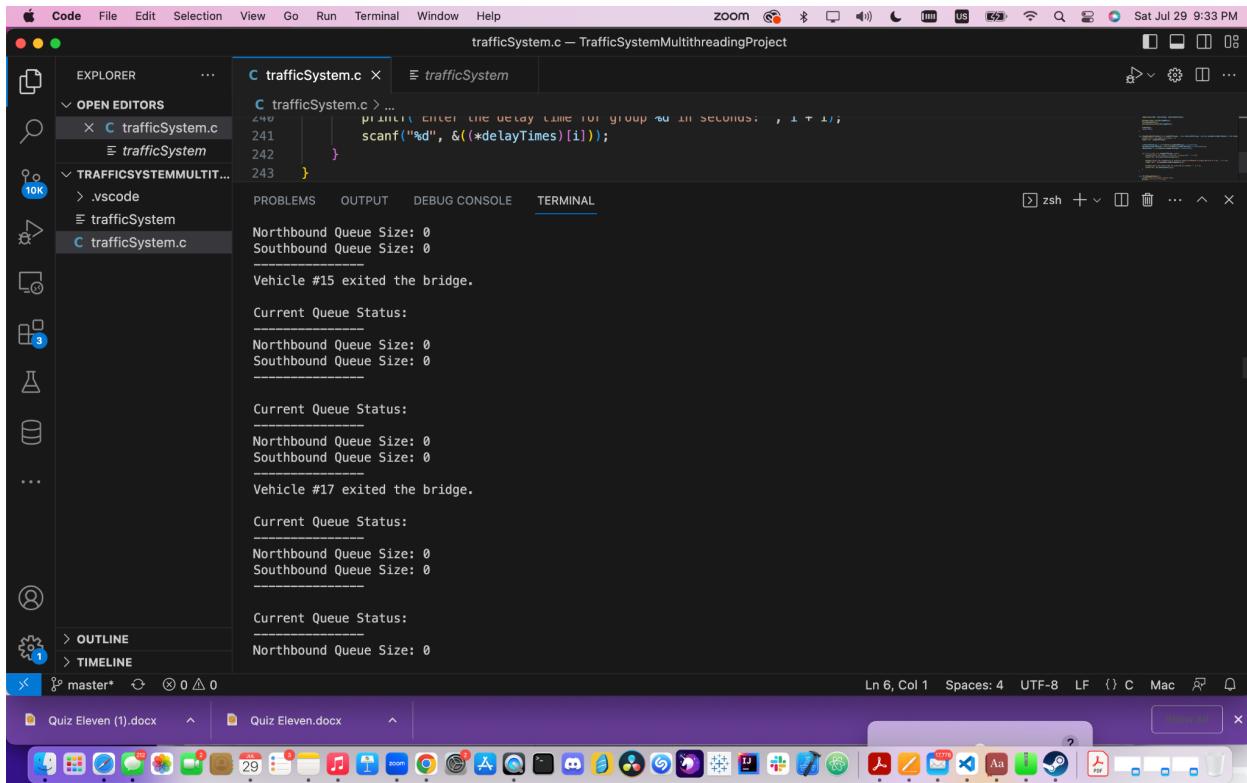
Current Queue Status:

Northbound Queue Size: 0

Ln 6, Col 1 Spaces: 4 UTF-8 LF ⚡ C Mac 🔍

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master* 0 0 △ 0



Sat Jul 29 9:33 PM

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS TRAFFICSYSTEMMULTIT... PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL zsh + ...

C trafficSystem.c > trafficSystem.c trafficSystem

```
440     printf("ENTER THE DELAY TIME FOR GROUP %d IN SECONDS: ", i+1);
241     scanf("%d", &(*delayTimes)[i]);
242 }
243 }
```

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #16 exited the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

Northbound Queue Size: 2
Southbound Queue Size: 0

Current Queue Status:

Northbound Queue Size: 6
Southbound Queue Size: 0

Vehicle #30 is now crossing the bridge.

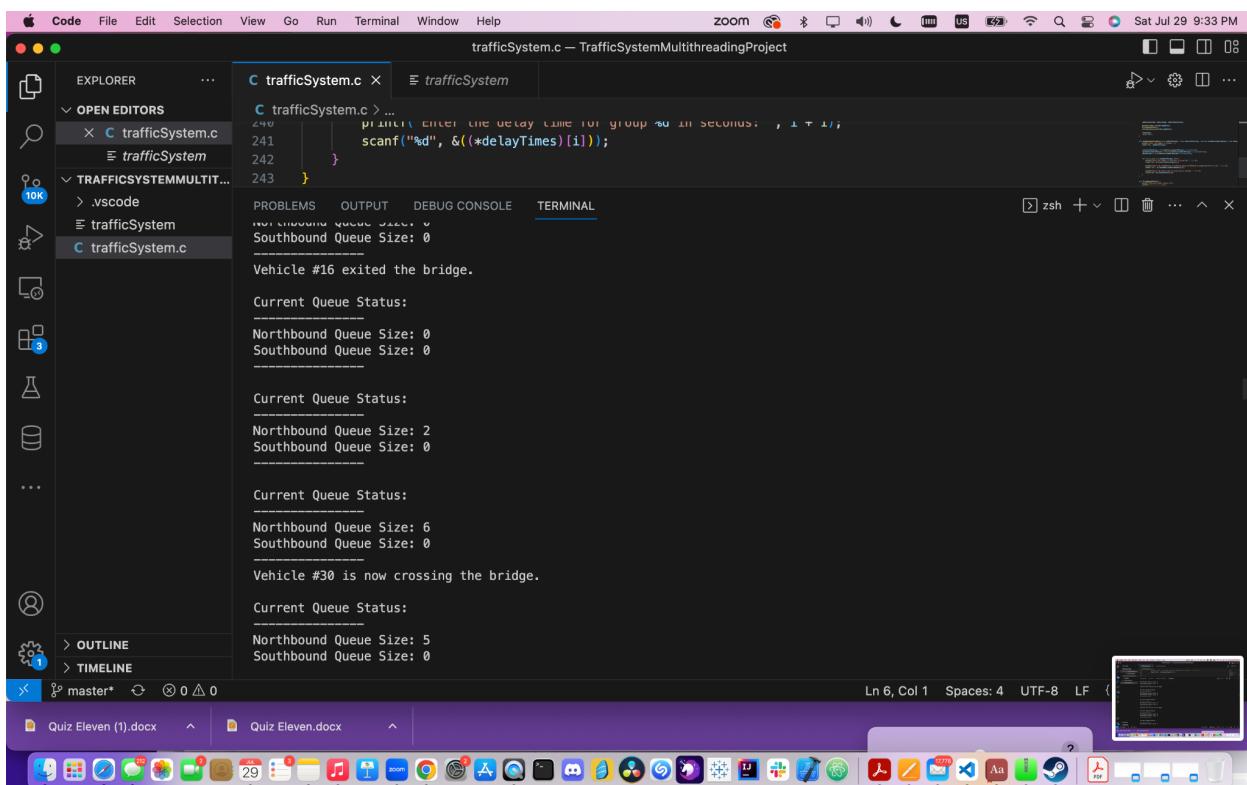
Current Queue Status:

Northbound Queue Size: 5
Southbound Queue Size: 0

Ln 6, Col 1 Spaces: 4 UTF-8 LF ⚡ C Mac 🔍

Quiz Eleven (1).docx Quiz Eleven.docx

master* 0 0 △ 0



```
trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS TRAFFICSYSTEMMULTITHREADINGPROJECT
C trafficSystem.c > ...
240     printf("ENTER THE DELAY TIME FOR GROUP %d IN SECONDS: ", i+1);
241     scanf("%d", &(delayTimes[i]));
242 }
243 }

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Vehicle #51 is now crossing the bridge.

Current Queue Status:
-----
Northbound Queue Size: 0
Southbound Queue Size: 2

Vehicle #51 is now crossing the bridge.

Current Queue Status:
-----
Northbound Queue Size: 0
Southbound Queue Size: 1

Vehicle #48 is now crossing the bridge.

Current Queue Status:
-----
Northbound Queue Size: 2
Southbound Queue Size: 0

Vehicle #48 is now crossing the bridge.

Current Queue Status:
-----
Northbound Queue Size: 1
Southbound Queue Size: 0
```

```
Code File Edit Selection View Go Run Terminal Window Help zoom trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER ...
OPEN EDITORS ...
TRAFFICSYSTEMMULTIT...
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Current Queue Status:
-----
Northbound Queue Size: 0
Southbound Queue Size: 0
-----
Vehicle #13 exited the bridge.

Current Queue Status:
-----
Northbound Queue Size: 0
Southbound Queue Size: 0
-----
Current Queue Status:
-----
Northbound Queue Size: 0
Southbound Queue Size: 0
-----
Vehicle #20 exited the bridge.

Current Queue Status:
-----
Northbound Queue Size: 0
Southbound Queue Size: 0
-----
Current Queue Status:
```

Sat Jul 29 9:33 PM

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS trafficSystem.c trafficSystem

TRAFFICSYSTEMMULTIT... .vscode trafficSystem trafficSystem.c

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Vehicle #31 exited the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #35 exited the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

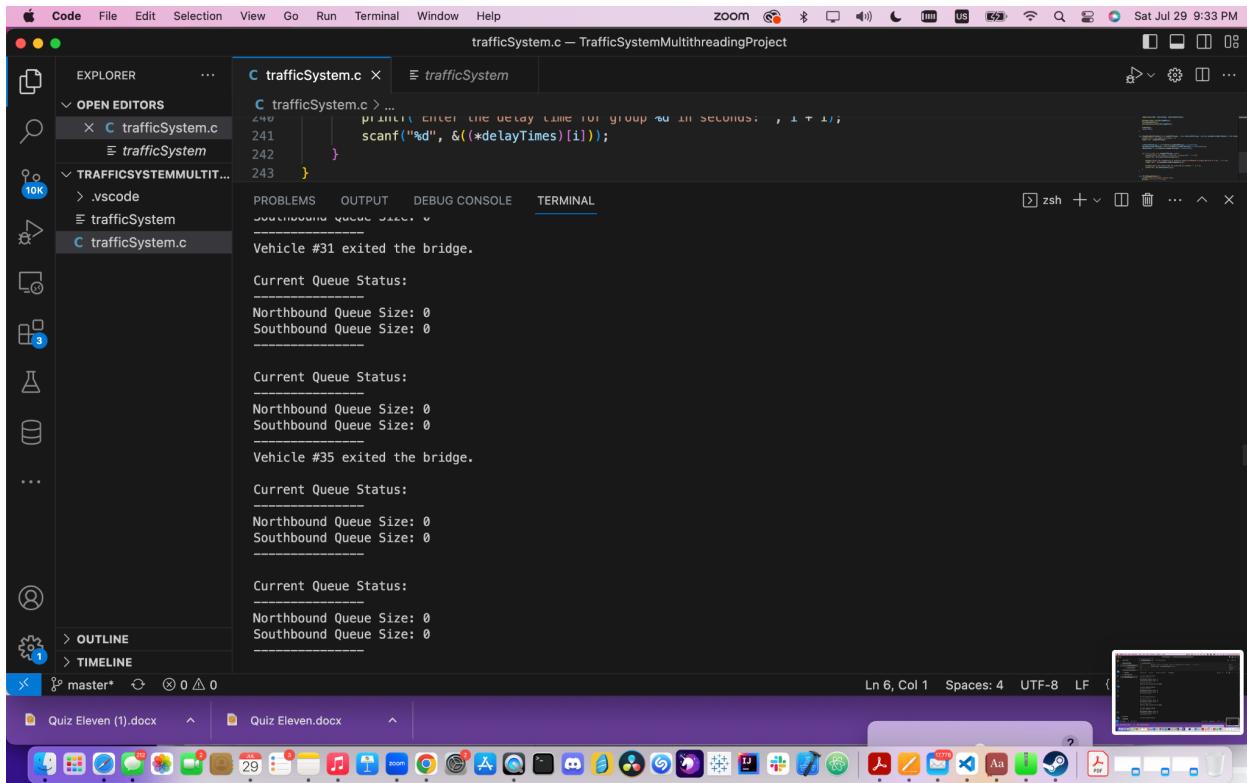
Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Ln 6, Col 1 Spaces: 4 UTF-8 LF

Quiz Eleven (1).docx Quiz Eleven.docx

master* 0 0 △ 0



Sat Jul 29 9:33 PM

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS trafficSystem.c trafficSystem

TRAFFICSYSTEMMULTIT... .vscode trafficSystem trafficSystem.c

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Vehicle #51 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 2

Vehicle #48 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 1

Vehicle #41 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 2
Southbound Queue Size: 0

Vehicle #41 is now crossing the bridge.

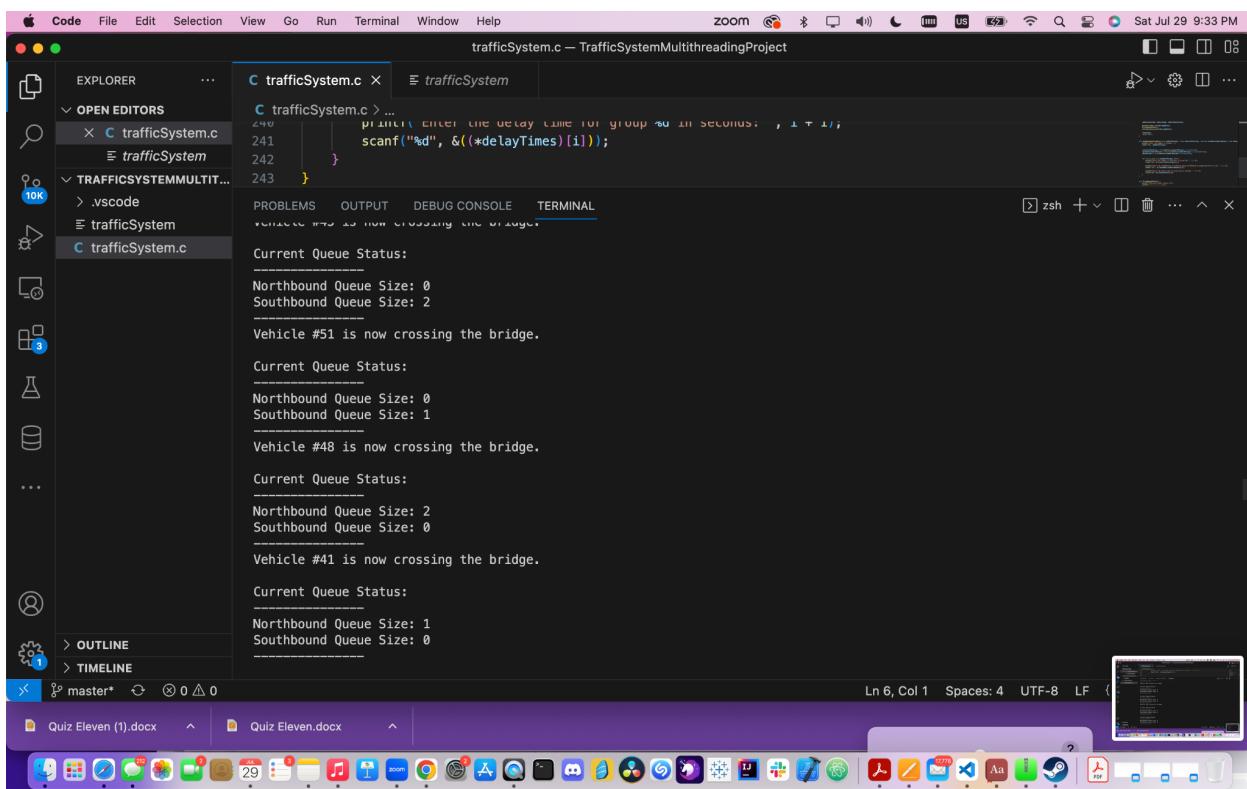
Current Queue Status:

Northbound Queue Size: 1
Southbound Queue Size: 0

Ln 6, Col 1 Spaces: 4 UTF-8 LF

Quiz Eleven (1).docx Quiz Eleven.docx

master* 0 0 △ 0



Sat Jul 29 9:33 PM

Code File Edit Selection View Go Run Terminal Window Help

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS TRAFFICSYSTEMMULTIT... PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL zsh

C trafficSystem.c x trafficSystem

```
C trafficSystem.c > ...
240     printf("ENTER THE DELAY TIME FOR GROUP %d IN SECONDS: ", i + 1);
241     scanf("%d", &(*delayTimes)[i]);
242 }
243 }
```

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #45 exited the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #41 exited the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Ln 6, Col 1 Spaces: 4 UTF-8 LF

Quiz Eleven (1).docx Quiz Eleven.docx

master* 0 0 △ 0

Sat Jul 29 9:33 PM

Code File Edit Selection View Go Run Terminal Window Help

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS TRAFFICSYSTEMMULTIT... PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL zsh

C trafficSystem.c x trafficSystem

```
C trafficSystem.c > ...
240     printf("ENTER THE DELAY TIME FOR GROUP %d IN SECONDS: ", i + 1);
241     scanf("%d", &(*delayTimes)[i]);
242 }
243 }
```

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 1

Vehicle #64 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 1
Southbound Queue Size: 0

Vehicle #66 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 1
Southbound Queue Size: 0

Vehicle #68 is now crossing the bridge.

Current Queue Status:

Ln 6, Col 1 Spaces: 4 UTF-8 LF

Quiz Eleven (1).docx Quiz Eleven.docx

master* 0 0 △ 0

Sat Jul 29 9:33 PM

Code File Edit Selection View Go Run Terminal Window Help

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS trafficSystem.c trafficSystem

TRAFFICSYSTEMMULTIT... .vscode trafficSystem trafficSystem.c

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #66 exited the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #68 exited the bridge.

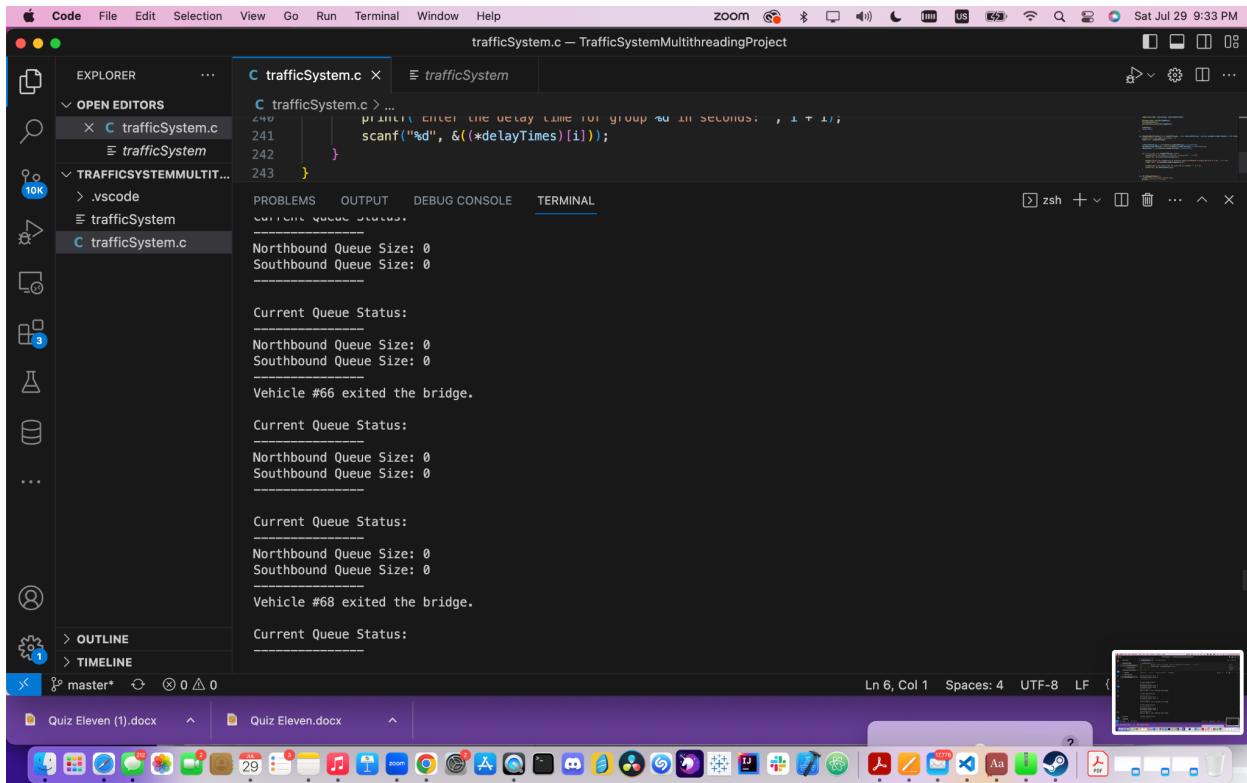
Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Ln 6, Col 1 Spaces: 4 UTF-8 LF

Quiz Eleven (1).docx Quiz Eleven.docx

master* 0 0 △ 0



Sat Jul 29 9:33 PM

Code File Edit Selection View Go Run Terminal Window Help

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS trafficSystem.c trafficSystem

TRAFFICSYSTEMMULTIT... .vscode trafficSystem trafficSystem.c

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Northbound Queue Size: 0
Southbound Queue Size: 1

Vehicle #63 is now crossing the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #57 exited the bridge.

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #65 exited the bridge.

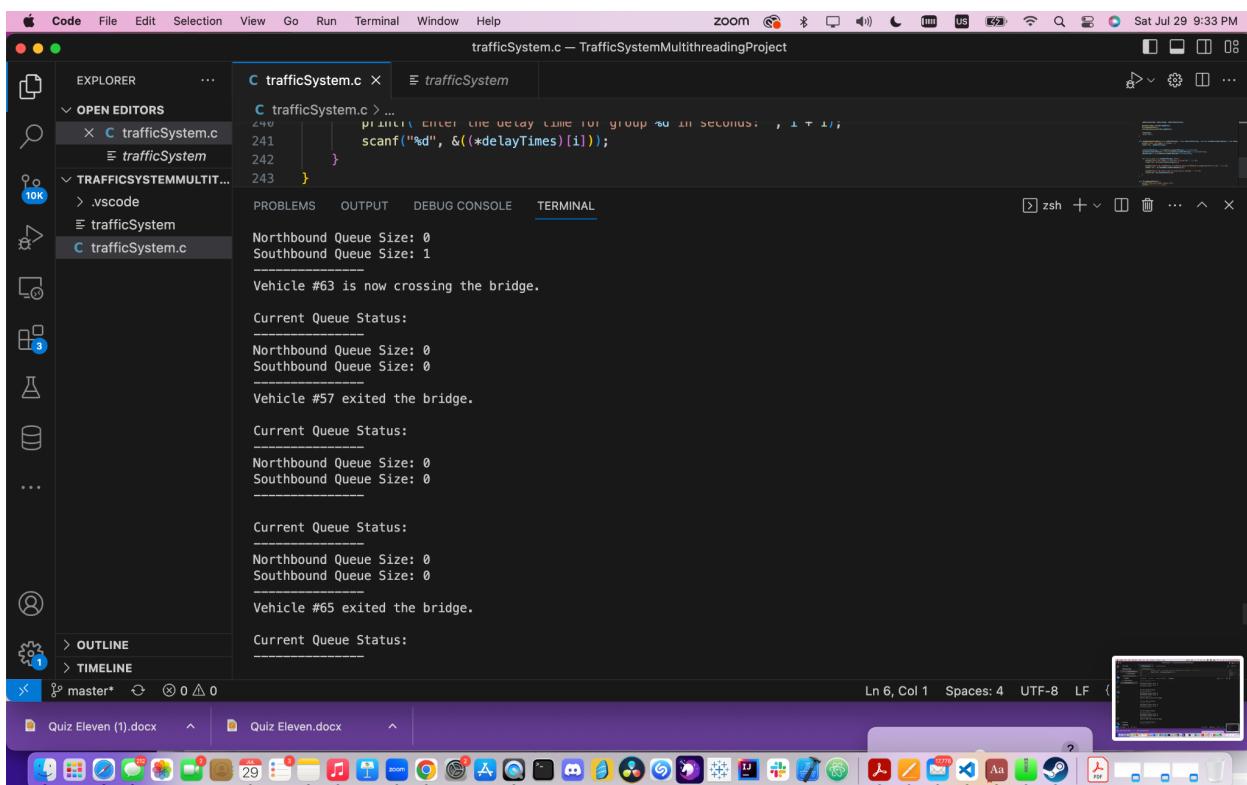
Current Queue Status:

Northbound Queue Size: 0
Southbound Queue Size: 0

Ln 6, Col 1 Spaces: 4 UTF-8 LF

Quiz Eleven (1).docx Quiz Eleven.docx

master* 0 0 △ 0



The screenshot shows a Mac OS X desktop with the Visual Studio Code application open. The title bar reads "trafficSystem.c — TrafficSystemMultithreadingProject". The main area displays the C file "trafficSystem.c" with the following code:

```
C trafficSystem.c > ...
400     printf("ENTER THE DELAY TIME FOR GROUP %d IN SECONDS: ", i+1);
401     scanf("%d", &(*delayTimes)[i]);
402 }
403 }
```

The terminal tab is active, showing the output of the program:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
...
Southbound Queue Size: 0
Vehicle #56 exited the bridge.
Current Queue Status:
-----
Northbound Queue Size: 0
Southbound Queue Size: 0
-----
Current Queue Status:
-----
Northbound Queue Size: 0
Southbound Queue Size: 0
-----
Vehicle #63 exited the bridge.
Current Queue Status:
-----
Northbound Queue Size: 0
Southbound Queue Size: 0
-----
Current Queue Status:
-----
Northbound Queue Size: 0
Southbound Queue Size: 0
```

The status bar at the bottom indicates "Ln 6, Col 1 Spaces: 4 UTF-8 LF". The dock at the bottom shows various Mac OS X applications.

Sat Jul 29 9:34 PM

Code File Edit Selection View Go Run Terminal Window Help

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS TRAFFICSYSTEMMULTIT... PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

trafficSystem.c >...

```
440     printf("ENTER THE DELAY TIME FOR GROUP %d IN SECONDS: ", i + 1);
241     scanf("%d", &(*delayTimes)[i]);
242 }
243 }
```

zsh +

Current Queue Status:
Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #63 exited the bridge.
Current Queue Status:
Northbound Queue Size: 0
Southbound Queue Size: 0

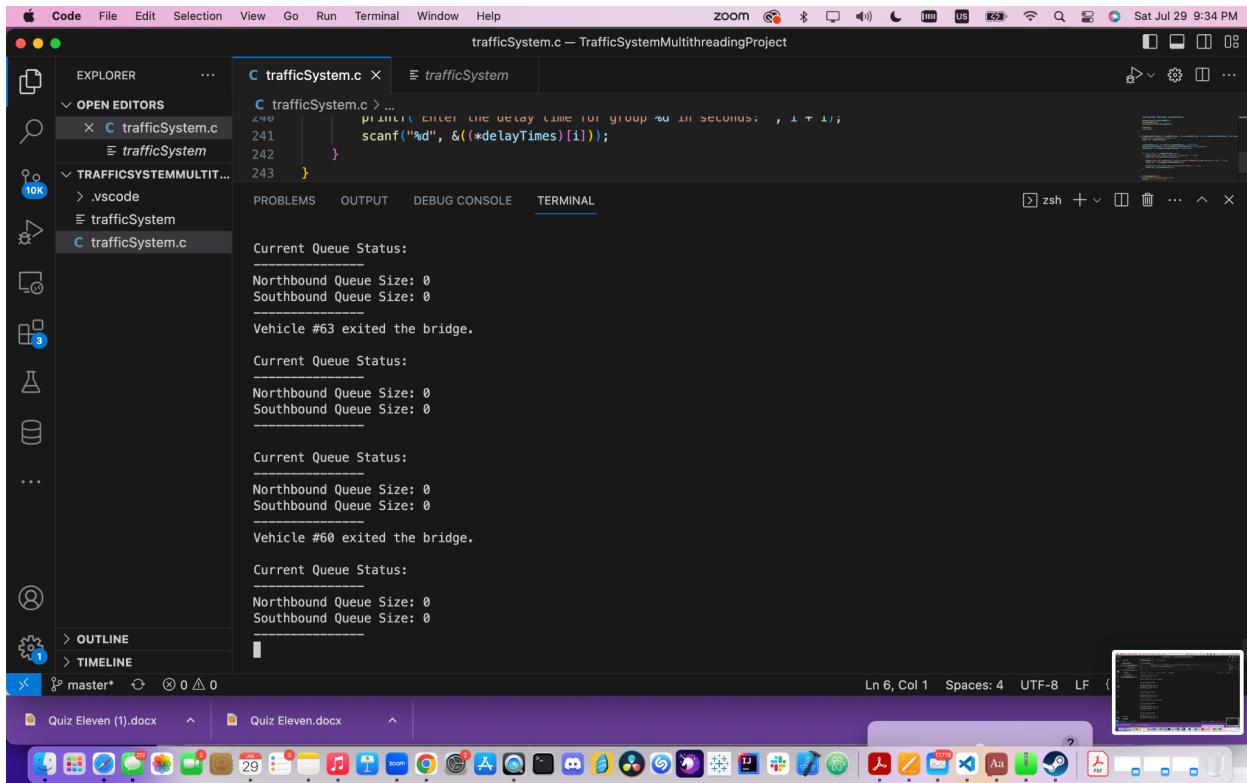
Current Queue Status:
Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #60 exited the bridge.
Current Queue Status:
Northbound Queue Size: 0
Southbound Queue Size: 0

Ln 6, Col 1 Spaces: 4 UTF-8 LF

Quiz Eleven (1).docx Quiz Eleven.docx

master* 0 0 △ 0



Sat Jul 29 9:30 PM

Code File Edit Selection View Go Run Terminal Window Help

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER OPEN EDITORS TRAFFICSYSTEMMULTIT... PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

trafficSystem.c >...

```
440     printf("ENTER THE DELAY TIME FOR GROUP %d IN SECONDS: ", i + 1);
241     scanf("%d", &(*delayTimes)[i]);
242 }
243 }
```

zsh +

Current Queue Status:
Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:
Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #7 exited the bridge.
Current Queue Status:
Northbound Queue Size: 0
Southbound Queue Size: 0

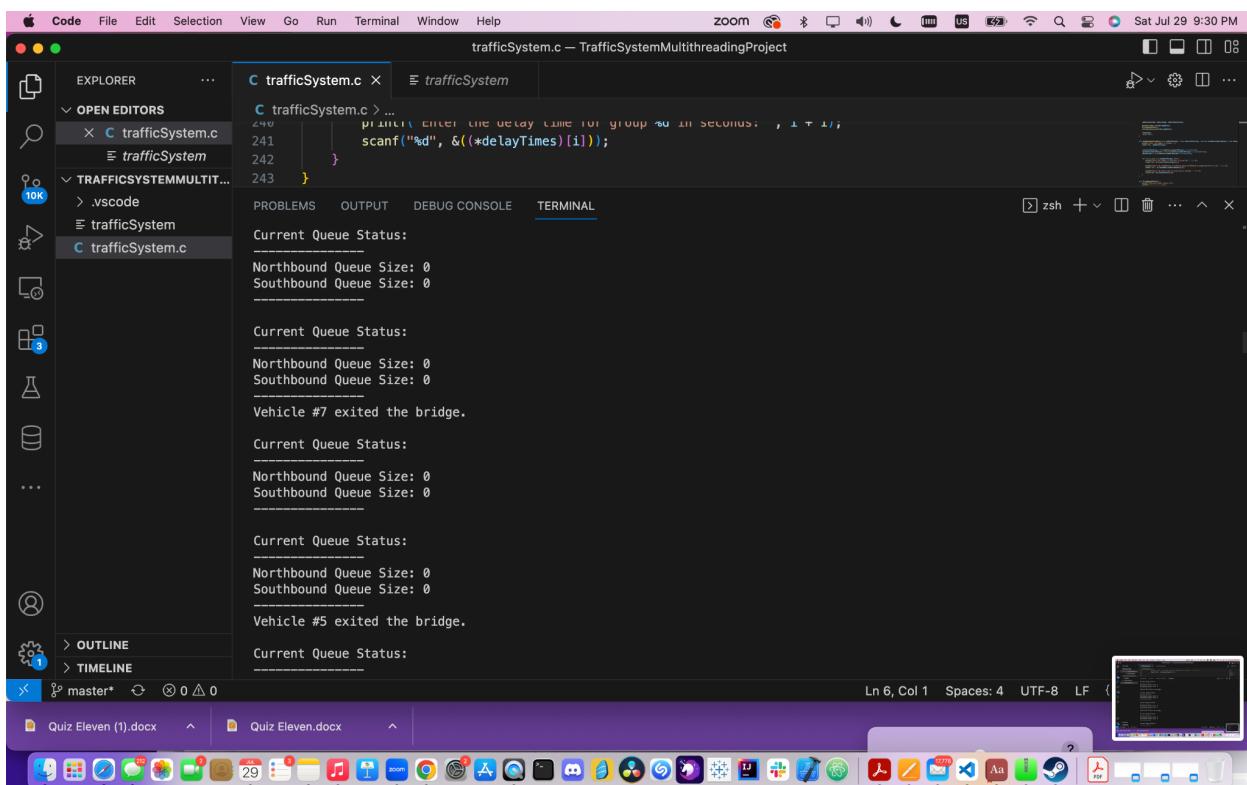
Current Queue Status:
Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #5 exited the bridge.
Current Queue Status:
Northbound Queue Size: 0
Southbound Queue Size: 0

Ln 6, Col 1 Spaces: 4 UTF-8 LF

Quiz Eleven (1).docx Quiz Eleven.docx

master* 0 0 △ 0



Sat Jul 29 9:37 PM

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER

OPEN EDITORS

C trafficSystem.c x trafficSystem

C trafficSystem.c > [o] southboundQueue

```
12 pthread_cond_t bridgeCond = PTHREAD_COND_INITIALIZER;
13
14 typedef enum {
```

PROBLEMS **OUTPUT** **DEBUG CONSOLE** **TERMINAL**

Current Queue Status:

```
-----
```

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

```
-----
```

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

```
-----
```

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #67 exited the bridge.

Current Queue Status:

```
-----
```

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

```
-----
```

Northbound Queue Size: 0
Southbound Queue Size: 0

Ln 32, Col 41 Spaces: 4 UTF-8 LF ⌂ C Mac ⌘ ⌘ ⌘

Quiz Eleven (1).docx Quiz Eleven.docx

master* 0 0 △ 0

This screenshot shows the VS Code interface with the terminal tab active. The terminal window displays the output of a C program named trafficSystem.c. The program prints current queue statuses for Northbound and Southbound directions, both of which show a size of 0. It also logs the exit of several vehicles from a bridge, specifically vehicle #67, #56, #63, and #60. The terminal status bar indicates the current line is 32, column 41, with 4 spaces, using UTF-8 encoding, and showing the Mac OS X keyboard layout.

Sat Jul 29 9:37 PM

trafficSystem.c — TrafficSystemMultithreadingProject

EXPLORER

OPEN EDITORS

C trafficSystem.c x trafficSystem

C trafficSystem.c > [o] southboundQueue

```
12 pthread_cond_t bridgeCond = PTHREAD_COND_INITIALIZER;
13
14 typedef enum {
```

PROBLEMS **OUTPUT** **DEBUG CONSOLE** **TERMINAL**

Vehicle #56 exited the bridge.

Current Queue Status:

```
-----
```

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

```
-----
```

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #63 exited the bridge.

Current Queue Status:

```
-----
```

Northbound Queue Size: 0
Southbound Queue Size: 0

Current Queue Status:

```
-----
```

Northbound Queue Size: 0
Southbound Queue Size: 0

Vehicle #60 exited the bridge.

Ln 32, Col 41 Spaces: 4 UTF-8 LF ⌂ C Mac ⌘ ⌘ ⌘

Quiz Eleven (1).docx Quiz Eleven.docx

master* 0 0 △ 0

This screenshot shows the VS Code interface with the terminal tab active. The terminal window displays the output of a C program named trafficSystem.c. The program prints current queue statuses for Northbound and Southbound directions, both of which show a size of 0. It also logs the exit of several vehicles from a bridge, specifically vehicle #56, #63, and #60. The terminal status bar indicates the current line is 32, column 41, with 4 spaces, using UTF-8 encoding, and showing the Mac OS X keyboard layout. A small window in the bottom right corner shows a preview of the current screen.

A screenshot of a Mac OS X desktop environment. The main focus is a terminal window titled "trafficSystem.c — TrafficSystemMultithreadingProject". The terminal is displaying the output of a C program. The program starts by defining a mutex variable:

```
12 pthread_cond_t bridgeCond = PTHREAD_COND_INITIALIZER;
```

It then defines an enum:

```
13
```

```
14 typedef enum {
```

The program then prints "Current Queue Status:" followed by two lines of queue size information:

```
15
```

```
16 Current Queue Status:
```

```
17 -----
```

```
18 Northbound Queue Size: 0
```

```
19 Southbound Queue Size: 0
```

```
20 -----
```

Subsequent outputs show vehicle exits:

```
21
```

```
22 Vehicle #63 exited the bridge.
```

```
23
```

```
24 Current Queue Status:
```

```
25 -----
```

```
26 Northbound Queue Size: 0
```

```
27 Southbound Queue Size: 0
```

```
28 -----
```

```
29
```

```
30 Vehicle #60 exited the bridge.
```

```
31
```

```
32 Current Queue Status:
```

```
33 -----
```

```
34 Northbound Queue Size: 0
```

```
35 Southbound Queue Size: 0
```

```
36 -----
```

The terminal window has tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, and TERMINAL. The status bar at the bottom right shows "Ln 32, Col 41 Spaces: 4 UTF-8 LF".