COMMAND FOR USAGE

The program can be used by typing below line into terminal:

```
./two   time_unit   total_time   probability   snap_time
```

time_unit: can be -s (for second) or -m (for minute)
total_time: execution time
probability: It has double precision, 0.00.
snap_time: time value to show snapshots. Its unit must be second.

Example Usage:

```
./two   -m   13   0.13   130
```

PROBABILITES

We used different random numbers to handle the probabilities of lanes. In other words, we used different sample spaces for each lane. For example, there would a new car in South lane whereas there is not in West lane.

The probability of having a new car in North lane is **1-p** not 1-3p. Its probability is also from the different sample space. For example, we would have new cars in both North and South lanes simultaneously.

PRORITY SCHEDULING

We put lanes into array. The priorities are N>E>S>W in any equality. In array N is #3 element and W is #0 element. We implemented functions which gives max element and its id in array such that in any equality the priority is handled easily. The more explanation can be found in .c file.

PART III

We used a condition variable and a flag variable to handle this part. When police begins to play his cell phone flag becomes 1 and police starts to wait for honk. When a car comes, the honk is signaled and flag becomes zero. Honk can be signaled in any lane.