

Program start

Initialization

```
count with carNumber from 1 to numberOfCars by 1
do
  Identify the Color of the Car
  say number carNumber
  Set Top Light to the Color of the Car
  Move to the Correct Color Intersection
  Beep at the Intersection
  Return to the Home Position
  set top light color
```

to Initialization

```
set numberOfCars to 7
set line-following speed: 60 mm/s
follow line to next intersection or line end
pick direction straight
```

to Identify the Color of the Car

```
set top light color
wait 5 seconds
try to do
  set LLMcolor to with LLM ask for number
  use camera? ☒
  prompt: What color car do you see--red, green, or blue?
  If red, answer with 1.
  If green, answer with 2.
  If blue, answer with 3.
in case of exception do
  print to IO console "LLM ERROR"
```

to Set Top Light to the Color of the Car

```
if LLMcolor = 1
do
  set top light color
else if LLMcolor = 2
do
  set top light color
else
  set top light color
```

to Move to the Correct Color Intersection

```
repeat LLMcolor times
do
  follow line to next intersection or line end
  pick direction straight
```

to Beep at the Intersection

```
repeat 2 times
do
  play note C octave 7 duration 100 ms
```

to Return to the Home Position

```
repeat 4 - LLMcolor times
do
  follow line to next intersection or line end
  pick direction straight
```