Code segments of the navigation system

```
// Define the pins connected to L298N
const int enablePin = 9;
const int in1Pin = 8;
const int in2Pin = 7;

void setup() {
  // Set the control pins as outputs
  pinMode(enablePin, OUTPUT);
  pinMode(in1Pin, OUTPUT);
  pinMode(in2Pin, OUTPUT);

  // Initialize serial communication for debugging
  Serial.begin(9600);
}

void loop() {
  // Set the motor direction (clockwise)
  digitalWrite(in1Pin, HIGH);
  digitalWrite(in2Pin, LOW);

  // Run the motor at full speed for 60 seconds
  for (int i = 0; i <= 255; i++) {
    analogWrite(enablePin, i);
    delay(235); // Adjust delay for approximately 60 seconds of run time
  }
```

```
  // Reverse the motor direction (counter-clockwise)
  digitalWrite(in1Pin, LOW);
  digitalWrite(in2Pin, HIGH);

  // Run the motor at full speed for another 60 seconds
  for (int i = 0; i <= 255; i++) {
    analogWrite(enablePin, i);
    delay(235); // Adjust delay for approximately 60 seconds of run time
  }
}
```