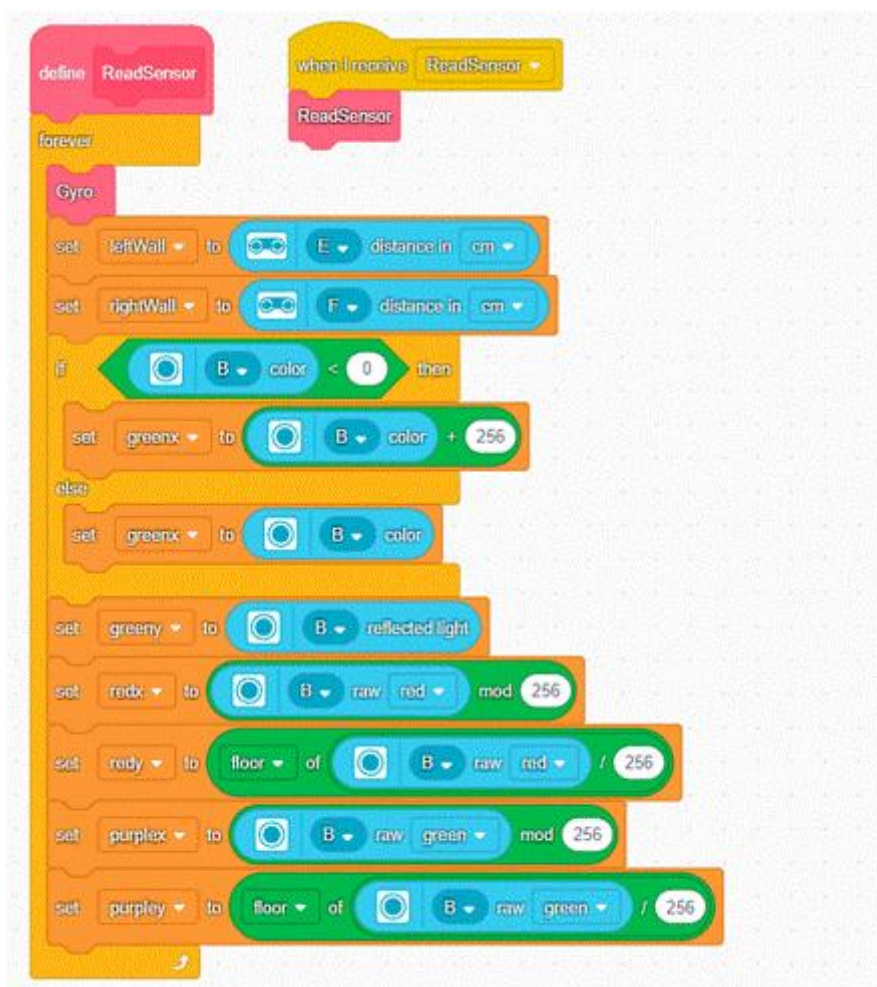
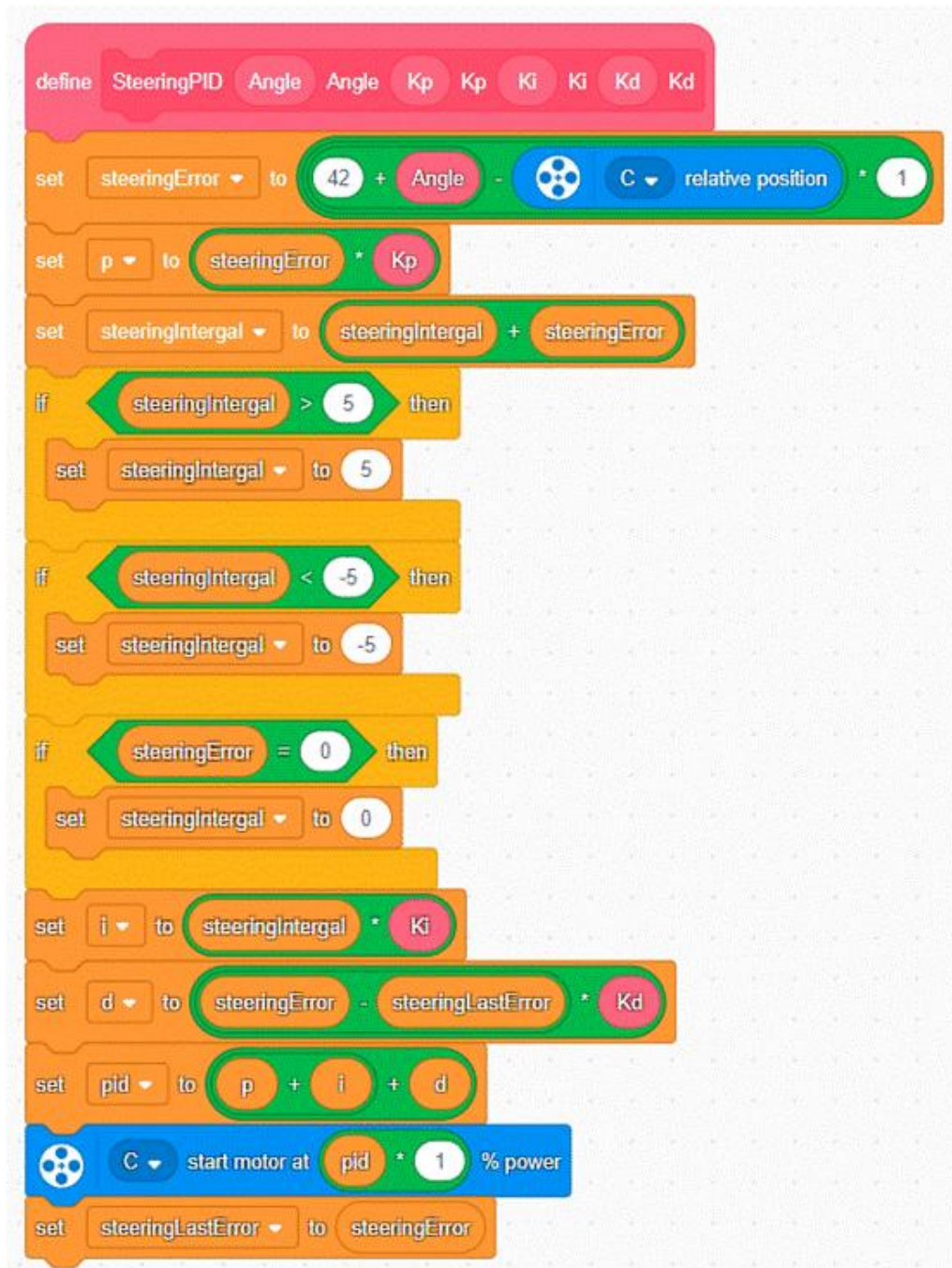
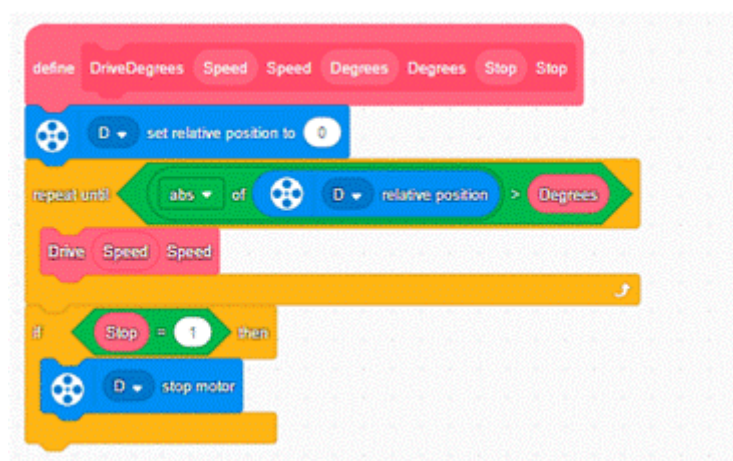
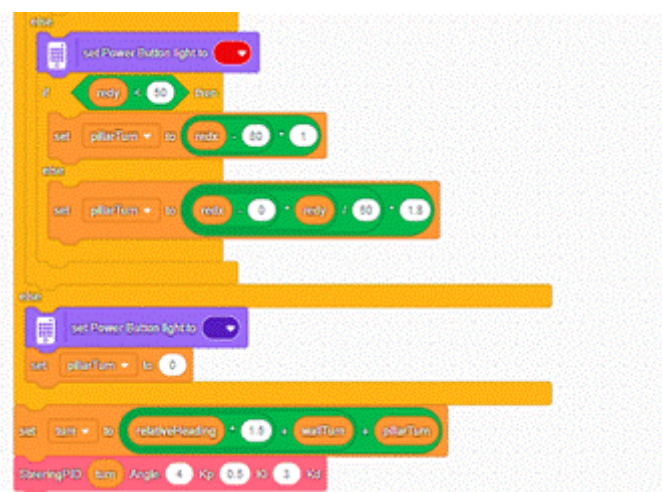
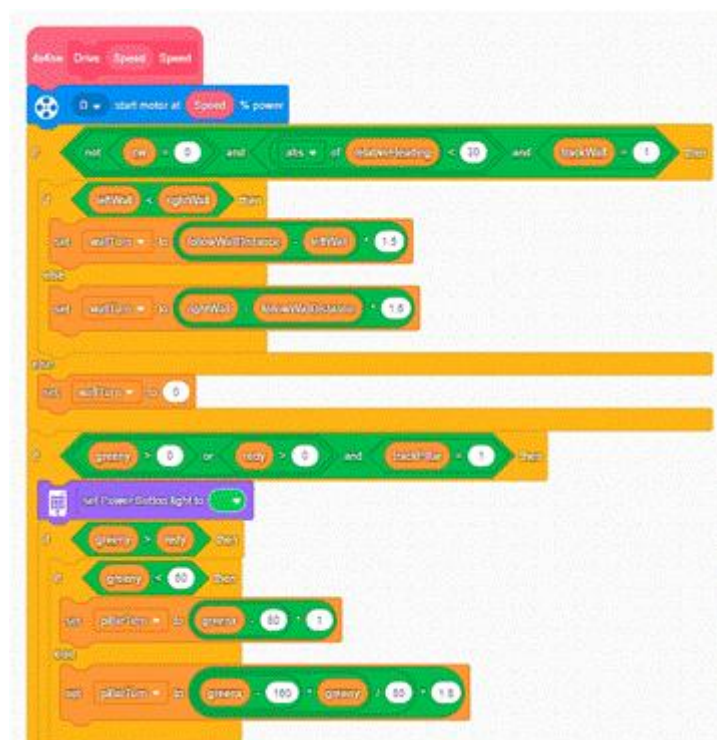


Appendix 3

Obstacle Challenge Coding








```

define SteeringDrive Steering Steering Speed Speed Degrees Degrees Stop Stop
D set relative position to 0
repeat until abs of D relative position > Degrees
D start motor at Speed % power
SteeringPID Steering Angle 4 Kp 0.5 Ki 3 Kd
if Stop = 1 then
D stop motor

```

```

define Drive3Round
repeat 3
set target to target + 90 * cw
DriveDegrees speed Speed 1000 Degrees 0 Stop
play beep 72 for 0.05 seconds
if cw = 1 then
repeat until A is color red ?
Drive speed Speed
else
repeat until A is color blue ?
Drive speed Speed
play beep 90 for 0.05 seconds
set target to target + 90 * cw
DriveDegrees speed Speed 1000 Degrees 1 Stop
if cw = 1 then
repeat until A is color red ?
Drive speed Speed
else
repeat until A is color blue ?
Drive speed Speed

```

