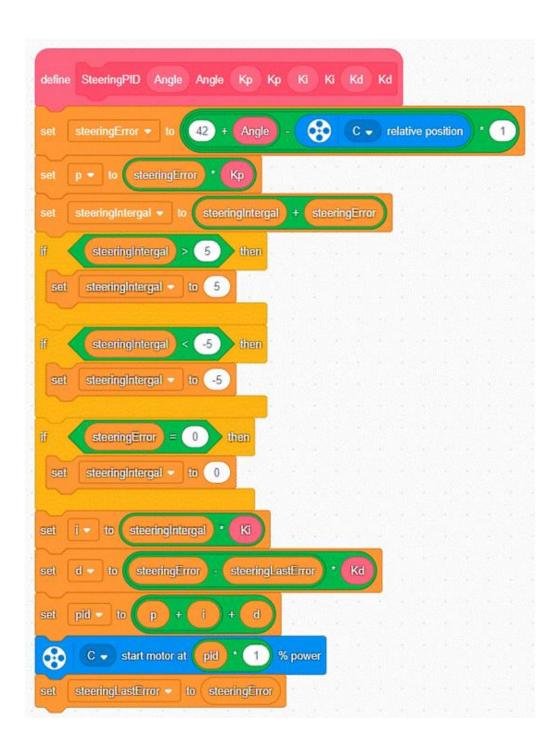
## Appendix 3 Obstacle Challenge Coding



```
when I receive ReadSensor =
define ReadSensor
                ○ ○ E • distance in cm •
                      F - distance in em
         (
             B - color
                        < 0
                       B - celor + 256
                       B - color
                B - reflected light
                    B - renv red - mod 256
                              B - new mid -
                  O B → raw green →
                                        mod 256
                 floor ▼ of O B ▼ rew green ▼
```



```
Action Drive Speed Speed

Or control of Speed Speed

Or control of speed Speed Speed

Or control of speed Speed Speed

Or control of speed Speed Speed Speed

Or control of speed Sp
```

```
define SteeringDrive Steering Steering Speed Speed 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
```

```
define Drive3Round
repeat 3
set target - to target + 90 ° cm
 DriveDegrees speed Speed 1000 Degrees 0 Stop
 play beep 72 for 0.05 seconds
 if (ov # 1) then
  repeatunti A viscolor / o
  repeatunti A • is color
   Drive speed Speed
  play beep 98 for 0.05 seconds
set target - to target + 60 *
DriveDegrees speed Speed 1000 Degrees 1 Stop
if (ow = 1) then
repeatural 🔘 🐧 lacolor 🗸 🗢
 Drive speed Speed
repeat until
 Drive speed Speed
```



```
repeat 11

change loopCount v by 1

set target v to target + 90 * cw

DriveDegrees speed Speed 1500 Degrees 0 Stop

set trackWall v to 1

play beep 72 for 0.05 seconds

if cw = 1 then

repeat until  F distance in cm v > 100

Drive speed Speed

else

repeat until  F distance in cm v > 100

Drive speed Speed

set target v to target + 90 * cw

DriveDegrees speed Speed 1000 Degrees 1 Stop
```

