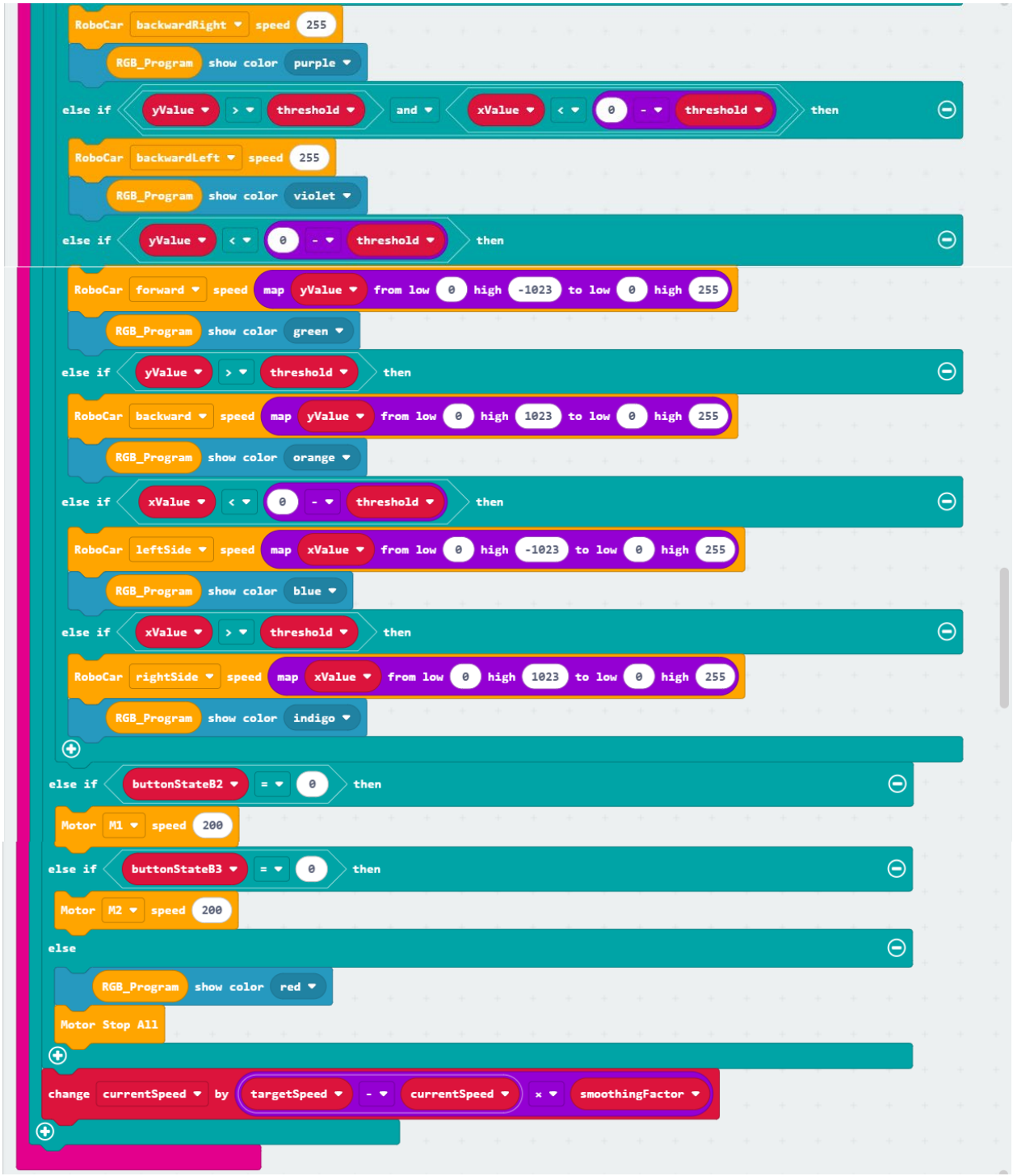

on radio received name value
if name = "x" then
set xValue to value
else if name = "y" then
set yValue to value
else if name = "B1" then
set buttonStateB1 to value
else if name = "B2" then
set buttonStateB2 to value
else if name = "B3" then
set buttonStateB3 to value
else if name = "B4" then
set buttonStateB4 to value
if buttonStateB1 = 0 then
RoboCar rotateLeft speed 200
else if buttonStateB4 = 0 then
RoboCar rotateRight speed 200
else
set targetSpeed to square root xValue x xValue + yValue x yValue / 1.67
if absolute of xValue > threshold or absolute of yValue > threshold then
if yValue < 0 - threshold and xValue > threshold then
RoboCar forwardRight speed 255
RGB_Program show color yellow
else if yValue < 0 - threshold and xValue < 0 - threshold then
RoboCar forwardLeft speed 255
RGB_Program show color white
else if yValue > threshold and xValue > threshold then
on start
set xValue to 0
set yValue to 0
set buttonStateB2 to 1
set buttonStateB3 to 1
set buttonStateB1 to 1
set smoothingFactor to 0.1
set threshold to 100
radio set group 1
radio set frequency band 50
show icon
forever
pause (ms) 40
show number currentSpeed


RoboCar backwardRight speed 255
RGB_Program show color purple
else if yValue > threshold and xValue < 0 - threshold then
RoboCar backwardLeft speed 255
RGB_Program show color violet
else if yValue < 0 - threshold then
RoboCar forward speed map yValue from low 0 high -1023 to low 0 high 255
RGB_Program show color green
else if yValue > threshold then
RoboCar backward speed map yValue from low 0 high 1023 to low 0 high 255
RGB_Program show color orange
else if xValue < 0 - threshold then
RoboCar leftSide speed map xValue from low 0 high -1023 to low 0 high 255
RGB_Program show color blue
else if xValue > threshold then
RoboCar rightSide speed map xValue from low 0 high 1023 to low 0 high 255
RGB_Program show color indigo
else if buttonStateB2 = 0 then
Motor M1 speed 200
else if buttonStateB3 = 0 then
Motor M2 speed 200
else
RGB_Program show color red
Motor Stop All
change currentSpeed by targetSpeed - currentSpeed x smoothingFactor