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# Project: VEXcode Project

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# Created:

# Description: VEXcode VR Python Project

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# Library imports

from vexcode import \*

brain.clear()

#function is running

def getLineBrightness(\*LineList):

global Csum,avg,Line,dec,i,p,c,i

avg=0

Csum=0

i=0

p=0

dec=0

c=1

line=0

i=0

while c<=5:

p=0

for Line in LineList:

brain.print(f"{LineList[i]}")

dec=dec+(LineList[line]\*pow(2,p))

p=p+1

line=line+1

i=i+1

if p==8:

brain.print(f"-->{dec}---")

i=line

break

pass

wait(5, MSEC)

if dec==65:

brain.print("A")

elif dec==66:

brain.print("B")

elif dec==67:

brain.print("C")

elif dec==68:

brain.print("D")

elif dec==69:

brain.print("E")

elif dec==70:

brain.print("F")

elif dec==71:

brain.print("G")

elif dec==72:

brain.print("H")

elif dec==73:

brain.print("I")

elif dec==74:

brain.print("J")

elif dec==75:

brain.print("K")

elif dec==76:

brain.print("L")

elif dec==77:

brain.print("M")

elif dec==78:

brain.print("N")

elif dec==79:

brain.print("O")

elif dec==80:

brain.print("P")

elif dec==81:

brain.print("Q")

elif dec==82:

brain.print("R")

elif dec==83:

brain.print("S")

elif dec==84:

brain.print("T")

elif dec==85:

brain.print("U")

elif dec==86:

brain.print("V")

elif dec==87:

brain.print("W")

elif dec==88:

brain.print("X")

elif dec==89:

brain.print("Y")

elif dec==90:

brain.print("Z")

elif dec==97:

brain.print("a")

elif dec==98:

brain.print("b")

elif dec==99:

brain.print("c")

elif dec==100:

brain.print("d")

elif dec==101:

brain.print("e")

elif dec==102:

brain.print("f")

elif dec==103:

brain.print("g")

elif dec==104:

brain.print("h")

elif dec==105:

brain.print("i")

elif dec==106:

brain.print("j")

elif dec==107:

brain.print("k")

elif dec==108:

brain.print("l")

elif dec==109:

brain.print("m")

elif dec==110:

brain.print("n")

elif dec==111:

brain.print("o")

elif dec==112:

brain.print("p")

elif dec==113:

brain.print("q")

elif dec==114:

brain.print("r")

elif dec==115:

brain.print("s")

elif dec==116:

brain.print("t")

elif dec==117:

brain.print("u")

elif dec==118:

brain.print("v")

elif dec==119:

brain.print("w")

elif dec==120:

brain.print("x")

elif dec==121:

brain.print("y")

elif dec==122:

brain.print("z")

else:

brain.print("zero")

brain.new\_line()

dec=0

c=c+1

wait(5, MSEC)

# Add project code in "main"

def main():

global control,j,Turn\_Control

j=0

Turn\_Control=1

drivetrain.set\_drive\_velocity(70, PERCENT)

monitor\_sensor("left\_bumper.pressed")

drivetrain.drive(FORWARD)

colors=[]

while j<=8:

#if bumper is 0,continue the loop

while not left\_bumper.pressed() :

control=1

while down\_eye.detect(BLUE):

if control!=0:

colors.append(0)

control=0

pass

wait(5,MSEC)

while down\_eye.detect(GREEN):

if control!=0:

colors.append(1)

control=0

pass

wait(5,MSEC)

wait(5, MSEC)

#if bumper is true and i variable is 8, break the loop.

if left\_bumper.pressed() and j==8:

break

pass

#program is controlling the direction of robot

if Turn\_Control==1:

drivetrain.turn\_for(RIGHT, 90, DEGREES)

drivetrain.drive\_for(FORWARD, 194, MM)#it can change becouse of internet connection

drivetrain.turn\_for(RIGHT,90,DEGREES)

drivetrain.drive(FORWARD)

Turn\_Control=0

pass

else:

drivetrain.turn\_for(LEFT, 90, DEGREES)

drivetrain.drive\_for(FORWARD, 194, MM)#it can change becouse of internet connection

drivetrain.turn\_for(LEFT,90,DEGREES)

drivetrain.drive(FORWARD)

Turn\_Control=1

pass

j=j+1

wait(5, MSEC)

#run the function

getLineBrightness(\*colors)

brain.new\_line()

#write the colors list to consol

brain.print(colors)

brain.new\_line()

drivetrain.stop()

stop\_project()

# VR threads — Do not delete

vr\_thread(main())