Initialize

Outputs

Motor

Inputs

Move forward

Stop

IR sensor

Echo sensor

Registers

PWM

ECHO distance

IR distance

START LOOP

(READ SENSORS)

IF INNER LEFT IR SENSOR = MAIN BLACK LINE

MOVE FORWARD

IF INNER RIGHT IR SENSOR = MAIN BLACK LINE

MOVE FORWARD

ELSE IF IR SENSOR = SMALL BLACK LINE

DETECT LINE WIDTH

IF LINE < 10 MM

MOVE FORWARD

ELSE IF IR SENSOR = WHITE

TURN LEFT UNTIL IR SENSOR = BLACK LINE

ELSE IF ECHO SENSOR =< 100 MM

TURN LEFT UNTIL ECHO SENSOR => 100 MM

MOVE FORWARD

ELSE IF FAR LEFT IR SENSOR = BLACK

WHILE MOVING FORWARD VEER LEFT

ELSE IF FAR RIGHT IR SENSOR = BLACK

WHILE MOVING FORWARD VEER LEFT

END LOOP