CODE FOR LINE FOLLOWER

#define LS 2 // left sensor

#define RS 3 // right sensor

#define LM1 5 // left motor M1a

#define LM2 4 // left motor M2a

#define RM1 7 // right motor M2a

#define RM2 6 // right motor M2b

void setup()

{

pinMode(LS, INPUT);

pinMode(RS, INPUT);

pinMode(LM1, OUTPUT);

pinMode(LM2, OUTPUT);

pinMode(RM1, OUTPUT);

pinMode(RM2, OUTPUT);

}

void loop()

{

if(digitalRead(LS) && digitalRead(RS)) // Move Forward on line

{

digitalWrite(LM1, HIGH);

digitalWrite(LM2, LOW);

digitalWrite(RM1, HIGH);

digitalWrite(RM2, LOW);

}

if(digitalRead(LS) && !(digitalRead(RS))) // turn left by rotationg left motors in forward and right ones in backward direction

{

digitalWrite(LM1, HIGH);

digitalWrite(LM2, LOW);

digitalWrite(RM1, LOW);

digitalWrite(RM2, HIGH);

}

if(!(digitalRead(LS)) && digitalRead(RS)) // Turn right by rotating right motors in forward and left ones in backward direction

{

digitalWrite(LM1, LOW);

digitalWrite(LM2, HIGH);

digitalWrite(RM1, HIGH);

digitalWrite(RM2, LOW);

}

if(!(digitalRead(LS)) && !(digitalRead(RS))) // Finish line, stop both the motors

{

digitalWrite(LM1, LOW);

digitalWrite(LM2, LOW);

digitalWrite(RM1, LOW);

digitalWrite(RM2, LOW);

}

}