Lab1

#define MOTOR\_D1\_PIN 4

#define MOTOR\_D2\_PIN 2

#define MOTOR\_PWM\_PIN 3

void setup() {Serial.begin(9600);

pinMode(MOTOR\_D1\_PIN,OUTPUT);

pinMode(MOTOR\_D2\_PIN,OUTPUT);

pinMode(MOTOR\_PWM\_PIN,OUTPUT);

}

void loop() {

delay(1000);

}

int doraemon(int one){

if (one>0){

digitalWrite(MOTOR\_D1\_PIN,HIGH);

digitalWrite(MOTOR\_D2\_PIN,LOW);

analogWrite(MOTOR\_PWM\_PIN,one);

Serial.print(one);

}

else if (one==0){

digitalWrite(MOTOR\_D1\_PIN,HIGH);

digitalWrite(MOTOR\_D2\_PIN,HIGH);

analogWrite(MOTOR\_PWM\_PIN,one);

Serial.print(one); }

else if (one<0){

Serial.print(one);

one=-one;

digitalWrite(MOTOR\_D1\_PIN,LOW);

digitalWrite(MOTOR\_D2\_PIN,HIGH);

analogWrite(MOTOR\_PWM\_PIN,one);

}

}

void serialEvent() {

int speed = Serial.parseInt();

Serial.print("Reciving:");

Serial.println(speed);

doraemon(speed);

}

Lab2

int count = 0;

void setup()

{

pinMode(2, INPUT\_PULLUP);

pinMode(3, INPUT);

Serial.begin(9600);

attachInterrupt(digitalPinToInterrupt(2),IDK,RISING);

}

void loop()

{

Serial.println(count);

delay(1000);

}

void IDK() {

count++;

}

Lab3

volatile long count = 0;

const int B\_PIN = 4;

void setup()

{

pinMode(2, INPUT\_PULLUP);

pinMode(3, INPUT\_PULLUP);

Serial.begin(9600);

attachInterrupt(digitalPinToInterrupt(2), countIt, RISING);

}

void countIt() {

count += digitalRead(B\_PIN) ? -1 : 1;

}

void loop()

{

Serial.println(count);

delay(100);

}