Koding Arduino Uno

```
#include <Servo.h>
#include <LiquidCrystal_I2C.h>
#include <Wire.h>
#include <Adafruit_PWMServoDriver.h>

Adafruit_PWMServoDriver pwm = Adafruit_PWMServoDriver();
#define MIN_PULSE_WIDTH     544
#define MAX_PULSE_WIDTH     2400
#define DEFAULT_PULSE_WIDTH 1500
#define FREQUENCY           50

uint8_t servonum0 = 0;
uint8_t servonum1 = 2;
uint8_t servonum2 = 4;
uint8_t servonum3 = 6;
uint8_t servonum4 = 8;
Servo servo1;
Servo servo2;

LiquidCrystal_I2C lcd(0x27, 16, 2);
int trigPin = 8;
int echoPin = 9;
int trigPin2 = 10;
int echoPin2 = 11;

void setup() {
  delay(1000);
  Serial.begin (9600);
  lcd.begin();
```

```cpp
  lcd.setCursor(0,0);
  lcd.print("Panjang=");
  lcd.setCursor(0,1);
  lcd.print("Lebar=");
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
  pinMode(trigPin2, OUTPUT);
  pinMode(echoPin2, INPUT);
  servo1.attach(4);
  servo2.attach(5);
  pwm.begin();
  pwm.setPWMFreq(FREQUENCY);
  delay(1000);
}

void loop() {
int j ;
  int duration, distance;
  digitalWrite (trigPin, HIGH);
  delayMicroseconds (10);
  digitalWrite (trigPin, LOW);
  duration = pulseIn (echoPin, HIGH);
  distance = (duration/2) / 29.1;
  int duration2, distance2;
      digitalWrite (trigPin2, HIGH);
      delayMicroseconds (10);
      digitalWrite (trigPin2, LOW);
      duration = pulseIn (echoPin2, HIGH);
      distance2 = (duration/2) / 29.1;
  double a = 17;
  double b = 14;
```

```
double panjang = a - distance;
double lebar = b - distance2;
double dimensi = panjang * lebar;

lcd.setCursor(8,0);
lcd.print(panjang);
lcd.setCursor(9,1);
lcd.print(lebar);

Serial.print("Panjang:");
Serial.print(panjang);
Serial.println();
delay(200);

Serial.print("Lebar:");
Serial.print(lebar);
Serial.println();
delay(200);

Serial.print("Dimensi:");
Serial.print(dimensi);
Serial.println();
delay(200);

if (dimensi >20 && dimensi <=44){
  pwm.setPWM(servonum0, 0, pulseWidth(10));
  delay(1000);
  servo1.write(160); //Gripper buka
  servo2.write(42);
  delay(3000);
  pwm.setPWM(servonum1, 0, pulseWidth(30));
```

```
  delay(2000);
  servo1.write(42);
  servo2.write(160);
  delay(4000);
  pwm.setPWM(servonum1, 0, pulseWidth(10));
  delay(1000);
  pwm.setPWM(servonum0, 0, pulseWidth(90));
  pwm.setPWM(servonum0, 0, pulseWidth(130));
  pwm.setPWM(servonum0, 0, pulseWidth(160));
  delay(3000);
  pwm.setPWM(servonum1, 0, pulseWidth(20));
  delay(1000);
  servo1.write(160); //Gripper buka
  servo2.write(42);
  delay(4000);
  pwm.setPWM(servonum1, 0, pulseWidth(0));
  delay(1000);
 }

 if (panjang <=6 && lebar <=6){
  pwm.setPWM(servonum0, 0, pulseWidth(90));
  delay(3000);
 }

 if (dimensi >=45){
    pwm.setPWM(servonum0, 0, pulseWidth(10));
  delay(1000);
  servo1.write(160); //Gripper buka
  servo2.write(42);
  delay(3000);
  pwm.setPWM(servonum1, 0, pulseWidth(30));
```

```
    delay(2000);
    servo1.write(42);
    servo2.write(160);
    delay(4000);
    pwm.setPWM(servonum1, 0, pulseWidth(10));
    delay(1000);
    pwm.setPWM(servonum0, 0, pulseWidth(80));
    delay(1000);
    pwm.setPWM(servonum1, 0, pulseWidth(20));
    delay(1000);
    servo1.write(160); //Gripper buka
    servo2.write(42);
    delay(4000);
    pwm.setPWM(servonum1, 0, pulseWidth(0));
    delay(1000);
  }

}

int pulseWidth(int angle){
  int pulse_wide, analog_value;
  pulse_wide = map(angle, 0, 180, MIN_PULSE_WIDTH,
MAX_PULSE_WIDTH);
  analog_value  = int(float(pulse_wide) / 1000000 * FREQUENCY * 4096);
  Serial.println(analog_value);
  return analog_value;
}
```