

Program Transmitter

```
const int tombol_maju = A1;
```

```
const int tombol_mundur = A0;
```

```
const int tombol_kanan = A2;
```

```
const int tombol_kiri = A3;
```

```
const int tombol_shift = A4;
```

```
int data_maju = 0;
```

```
int data_mundur = 0;
```

```
int data_kanan = 0;
```

```
int data_kiri = 0;
```

```
int data_shift = 0;
```

```
void setup() {
```

```
  Serial.begin(9600);
```

```
  pinMode(tombol_maju,INPUT);
```

```
  pinMode(tombol_mundur,INPUT);
```

```
  pinMode(tombol_kanan,INPUT);
```

```
  pinMode(tombol_kiri,INPUT);
```

```
  pinMode(tombol_shift,INPUT);
```

```
  digitalWrite(tombol_maju,HIGH);
```

```
  digitalWrite(tombol_mundur,HIGH);
```

```
  digitalWrite(tombol_kanan,HIGH);
```

```
  digitalWrite(tombol_kiri,HIGH);
```

```
  digitalWrite(tombol_shift,HIGH);
```

```
}  
  
void maju()  
{  
    Serial.println("a");  
}  
  
void mundur()  
{  
    Serial.println("b");  
}  
  
void belok_kanan()  
{  
    Serial.println("c");  
}  
  
void belok_kiri()  
{  
    Serial.println("d");  
}  
  
void berhenti()  
{  
    Serial.println("g");  
}  
  
void servo_kanan()  
{  
    Serial.println("h");  
}  
  
void servo_kiri()
```

```
{  
  Serial.println("i");  
}  
void loop() {  
  
  data_maju = digitalRead(tombol_maju);  
  data_mundur = digitalRead(tombol_mundur);  
  data_kanan = digitalRead(tombol_kanan);  
  data_kiri = digitalRead(tombol_kiri);  
  data_shift = digitalRead(tombol_shift);  
  
  if(data_maju == LOW && data_shift == HIGH){  
    maju();  
  }  
  if(data_mundur == LOW && data_shift == HIGH){  
    mundur();  
  }  
  if(data_kanan == LOW && data_shift == HIGH){  
    belok_kanan();  
  }  
  if(data_kiri == LOW && data_shift ==HIGH){  
    belok_kiri();  
  }  
  if(data_shift == LOW && data_kiri == HIGH && data_kanan == HIGH &&  
  data_maju == HIGH && data_mundur == HIGH ){  
    berhenti();  
  }  
}
```

```
if(data_shift == LOW && data_maju == LOW){  
    servo_kanan();  
}  
if(data_shift == LOW && data_mundur == LOW){  
    servo_kiri();  
}  
}
```

Program Receiver

```
#include<SoftwareSerial.h>  
  
#include<Servo.h>  
  
char inByte;  
  
const int kanan_maju = 3;  
const int kanan_mundur = 4;  
const int kecepatan_kanan = 5;  
const int kecepatan_kiri = 6;  
const int kiri_maju = A5;  
const int kiri_mundur = A4;  
  
int sudut;  
  
Servo kamera;  
  
void mundur()  
{  
    digitalWrite(kanan_maju,HIGH);  
    digitalWrite(kanan_mundur,LOW);  
    analogWrite(kecepatan_kanan,255);  
    analogWrite(kecepatan_kiri,255);
```

```
digitalWrite(kiri_maju,HIGH);
digitalWrite(kiri_mundur,LOW);
}
void maju()
{
digitalWrite(kanan_maju,LOW);
digitalWrite(kanan_mundur,HIGH);
analogWrite(kecepatan_kanan,255);
analogWrite(kecepatan_kiri,255);
digitalWrite(kiri_maju,LOW);
digitalWrite(kiri_mundur,HIGH);
}
void belok_kanan()
{
digitalWrite(kanan_maju,LOW);
digitalWrite(kanan_mundur,HIGH);
analogWrite(kecepatan_kanan,128);
analogWrite(kecepatan_kiri,255);
digitalWrite(kiri_maju,HIGH);
digitalWrite(kiri_mundur,LOW);
}
void belok_kiri()
{
digitalWrite(kanan_maju,HIGH);
digitalWrite(kanan_mundur,LOW);
analogWrite(kecepatan_kanan,255);
analogWrite(kecepatan_kiri,128);
```

```
digitalWrite(kiri_maju,LOW);
digitalWrite(kiri_mundur,HIGH);
}
void berhenti ()
{
digitalWrite(kanan_maju,LOW);
digitalWrite(kanan_mundur,LOW);
analogWrite(kecepatan_kanan,0);
analogWrite(kecepatan_kiri,0);
digitalWrite(kiri_maju,LOW);
digitalWrite(kiri_mundur,LOW);

}
void servo_kanan()
{
sudut = sudut+15;
if(sudut>=179){sudut=179;}
kamera.write(sudut);
delay(500);
inByte==0;
}

void servo_kiri()
{
sudut = sudut-15;
if(sudut<=1){sudut=1;}
kamera.write(sudut);
```

```
inByte==0;
delay(500);
}

void setup()
{
pinMode(kanan_maju,OUTPUT);
pinMode(kanan_mundur,OUTPUT);
pinMode(kecepatan_kanan,OUTPUT);
pinMode(kecepatan_kiri,OUTPUT);
pinMode(kiri_maju,OUTPUT);
pinMode(kiri_mundur,OUTPUT);

Serial.begin(9600);
kamera.attach(2);
}

void loop()
{

if (Serial.available(>0)){
inByte = Serial.read ();
Serial.println(inByte);

if(inByte=='a'){
Serial.println("maju");
maju();
}
}
```

```
if(inByte=='b'){
    Serial.println("mundur");
    mundur();
}

if(inByte=='c'){
    Serial.println("belok_kanan");
    belok_kanan();
}

if(inByte=='d'){
    Serial.println("belok_kiri");
    belok_kiri();
}

if(inByte=='g'){
    Serial.println("berhenti");
    berhenti();
}

if(inByte=='h'){
    Serial.println("servo_kanan");
    servo_kanan();
}

if(inByte=='i'){
    Serial.println("servo_kiri");
    servo_kiri();
}
}
}
```