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int j_kiri=0;
int j_depan=0;
int j_kanan=0;
int j_belakang=0;

int state = 0;
const int lasser1 = A0;
const int lasser2= A1;

int buzzerPin = 3;
const int led1 = A5;
const int led2 = A4;

//sensor 1
#define ECHOPIN 9 // Pin to receive echo
pulse
#define TRIGPIN 10 // Pin to send trigger pulse

//sensor 2
#define ECHOPIN1 4 // Pin to receive echo
pulse
#define TRIGPIN1 5 // Pin to send trigger pulse

//sensor 3
#define ECHOPIN2 6 // Pin to receive echo
pulse
#define TRIGPIN2 7 // Pin to send trigger pulse

//sensor 4
#define ECHOPIN3 11 // Pin to receive echo
pulse
#define TRIGPIN3 12 // Pin to send trigger
pulse

void sensor1(){
    digitalWrite(TRIGPIN, LOW); // Set the trigger pin to
    low for 2uS
    delayMicroseconds(2);
    digitalWrite(TRIGPIN, HIGH); // Send a 10uS high to
    trigger ranging
    delayMicroseconds(10);
    digitalWrite(TRIGPIN, LOW); // Send pin low again
    j_kanan = pulseIn(ECHOPIN, HIGH); // Read in times pulse
}

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j_kanan= j_kanan/58;                                // Calculate distance from
time of pulse
delay(100);
}

void sensor2(){
    digitalWrite(TRIGPIN1, LOW);                      // Set the trigger pin to
low for 2uS
    delayMicroseconds(2);                            // Send a 10uS high to
trigger ranging
    delayMicroseconds(10);
    digitalWrite(TRIGPIN1, LOW);                      // Send pin low again
    j_depan = pulseIn(ECHOPIN1, HIGH);                // Read in times pulse
    j_depan= j_depan/58;                            // Calculate distance from
time of pulse
    delay(100);
}

void sensor3(){
    digitalWrite(TRIGPIN2, LOW);                      // Set the trigger pin to
low for 2uS
    delayMicroseconds(2);                            // Send a 10uS high to
trigger ranging
    delayMicroseconds(10);
    digitalWrite(TRIGPIN2, LOW);                      // Send pin low again
    j_kiri = pulseIn(ECHOPIN2, HIGH);                // Read in times pulse
    j_kiri= j_kiri/58;                            // Calculate distance from time
of pulse
    delay(100);
}

void sensor4(){
    digitalWrite(TRIGPIN3, LOW);                      // Set the trigger pin to
low for 2uS
    delayMicroseconds(2);                            // Send a 10uS high to
trigger ranging
    delayMicroseconds(10);
    digitalWrite(TRIGPIN3, LOW);                      // Send pin low again
    j_belakang = pulseIn(ECHOPIN3, HIGH);              // Read in times pulse
    j_belakang= j_belakang/58;                        // Calculate distance
from time of pulse
    delay(100);
}

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void beep(unsigned char delayms)
{
    analogWrite(buzzerPin, 100);
    delay(500);
    analogWrite(buzzerPin, 0);
    delay(500);
}

void setup(){
    Serial.begin(9600);
    pinMode(buzzerPin, OUTPUT);
    pinMode(ECHOPIN, INPUT);
    pinMode(TRIGPIN, OUTPUT);
    pinMode(ECHOPIN1, INPUT);
    pinMode(TRIGPIN1, OUTPUT);
    pinMode(ECHOPIN2, INPUT);
    pinMode(TRIGPIN2, OUTPUT);
    pinMode(ECHOPIN3, INPUT);
    pinMode(TRIGPIN3, OUTPUT);
    pinMode(led1, OUTPUT);
    pinMode(led2, OUTPUT);
    pinMode(lasser1, OUTPUT);
    pinMode(lasser2, OUTPUT);
    digitalWrite(lasser1, LOW);
    digitalWrite(lasser2, LOW);
    digitalWrite(led1, HIGH);
    digitalWrite(led2, HIGH);
}

void loop(){
    sensor1();
    sensor2();
    sensor3();
    sensor4();

    //sensor 1
    //Serial.print("S1=");
    //Serial.println(j_kanan);

    //sensor 2
    //Serial.print("S2=");
}

```

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//Serial.println(j_depan);

//sensor 3
// Serial.print("S3=");
// Serial.println(j_kiri);

//sensor 4
//Serial.print("S4=");
// Serial.println(j_belakang);

// Serial.println("      ");
// Serial.println("      ");
//Serial.println("      ");
// Serial.println("      ");
//Serial.println("      ");

delay(500);

digitalWrite(led1, HIGH);
digitalWrite(led2, HIGH);
analogWrite(buzzerPin, 0);
if(Serial.available() > 0){ // Checks whether data is comming from the serial
port
    state = Serial.read(); // Reads the data from the serial port
}

if (state == 'W') {
    digitalWrite(lasser1, HIGH);
    state = 0;
}

if (state == 'R') {
    digitalWrite(lasser1, LOW);
    state = 0;
}

if (state == 'Y') {
    digitalWrite(lasser2, LOW);
    state = 0;
}
if (state == 'Z') {
    digitalWrite(lasser2, HIGH);
    state = 0;
}

```

```

//-----BAGIAN PARKIR
A-----//
//PARKIR A.1
if (j_kanan<=15 && j_depan>=16 && j_kiri>=16 && j_belakang>=16 )
{
    delay(2000);
    digitalWrite(led1, LOW);
    Serial.println("PARKIR A : S1SALAH");
    Serial.println("          ");
    Serial.println("PARKIR B :    BENAR");
    beep(500);
    delay(100);
}
//PARKIR A.2
else if (j_kanan>=16 && j_depan<=15 && j_kiri>=16 && j_belakang>=16 )
{
    delay(2000);
    digitalWrite(led1, LOW);
    Serial.println("PARKIR A : S2SALAH");
    Serial.println("          ");
    Serial.println("PARKIR B :    BENAR");
    beep(500);
    delay(100);
}
//-----BAGIAN PARKIR
B-----//
//PARKIR B.3
if (j_kanan>=16 && j_depan>=16 && j_kiri<=15 && j_belakang>=16 )
{
    delay(2000);
    digitalWrite(led2, LOW);
    Serial.println("PARKIR A :    BENAR");
    Serial.println("          ");
    Serial.println("PARKIR B : S3SALAH");
    beep(500);
    delay(100);
}
//PARKIR B.4
else if (j_kanan>=16 && j_depan>=16 && j_kiri>=16 && j_belakang<=15 )
{
    delay(2000);
    digitalWrite(led2, LOW);
    Serial.println("PARKIR A :    BENAR");
    Serial.println("          ");
    Serial.println("PARKIR B : S4SALAH");
    beep(500);
}

```

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delay(100);
}

//-----BAGIAN PARKIR A DAN
B-----//



//PARKIR AB.1,4
if (j_kanan<=15 && j_depan>=16 && j_kiri>=16 && j_belakang<=15 )
{
    delay(2000);
    digitalWrite(led1, LOW);
    digitalWrite(led2, LOW);
    Serial.println("PARKIR A : S1SALAH");
    Serial.println("          ");
    Serial.println("PARKIR B : S4SALAH");
    beep(500);
    delay(100);
}
//PARKIR AB.2,3
else if (j_kanan>=16 && j_depan<=15 && j_kiri<=15 && j_belakang>=16 )
{
    delay(2000);
    digitalWrite(led1, LOW);
    digitalWrite(led2, LOW);
    Serial.println("PARKIR A : S2SALAH");
    Serial.println("          ");
    Serial.println("PARKIR B : S3SALAH");
    beep(500);
    delay(100);
}
//PARKIR AB.1,3
else if (j_kanan<=15 && j_depan>=16 && j_kiri<=15 && j_belakang>=16 )
{
    delay(2000);
    digitalWrite(led1, LOW);
    digitalWrite(led2, LOW);
    Serial.println("PARKIR A : S1SALAH");
    Serial.println("          ");
    Serial.println("PARKIR B : S3SALAH");
    beep(500);
    delay(100);
}
//PARKIR AB.2,4
else if (j_kanan>=16 && j_depan<=15 && j_kiri>=16 && j_belakang<=15 )
{
    delay(2000);
    digitalWrite(led1, LOW);
    digitalWrite(led2, LOW);
}

```

```

Serial.println("PARKIR A : S2SALAH");
Serial.println("          ");
Serial.println("PARKIR B : S4SALAH");
beep(500);
delay(100);
}

//PARKIR A.1,2
else if (j_kanan<=15 && j_depan<=15 && j_kiri>=16 && j_belakang>=16 )
{
    delay(2000);
    digitalWrite(led1, LOW);
    Serial.println("PARKIR A :    SALAH");
    Serial.println("          ");
    Serial.println("PARKIR B :    BENAR");
    beep(500);
    delay(100);
}
//PARKIR B.3,4
else if (j_kanan>=16 && j_depan>=16 && j_kiri<=15 && j_belakang<=15 )
{
    delay(2000);
    digitalWrite(led2, LOW);
    Serial.println("PARKIR A :    BENAR");
    Serial.println("          ");
    Serial.println("PARKIR B :    SALAH");
    beep(500);
    delay(100);
}
//PARKIR AB.1,2,3,4
else if (j_kanan<=15 && j_depan<=15 && j_kiri<=15 && j_belakang<=15 )
{
    delay(2000);
    digitalWrite(led1, LOW);
    digitalWrite(led2, LOW);
    Serial.println("PARKIR A :    SALAH");
    Serial.println("          ");
    Serial.println("PARKIR B :    SALAH");
    beep(500);
    delay(100);
}
//PARKIR AB.1,2,3,
else if (j_kanan<=15 && j_depan<=15 && j_kiri<=15 && j_belakang>=16 )
{
    delay(2000);
}

```

```

digitalWrite(led1, LOW);
digitalWrite(led2, LOW);
Serial.println("PARKIR A : SALAH");
Serial.println("          ");
Serial.println("PARKIR B : S3SALAH");
beep(500);
delay(100);
}

//PARKIR AB.1,2,4
else if (j_kanan<=15 && j_depan<=15 && j_kiri>=16 && j_belakang<=15 )
{
    delay(2000);
    digitalWrite(led1, LOW);
    digitalWrite(led2, LOW);
    Serial.println("PARKIR A : SALAH");
    Serial.println("          ");
    Serial.println("PARKIR B : S4SALAH");
    beep(500);
    delay(100);
}
//PARKIR AB.1,3,4
else if (j_kanan<=15 && j_depan>=16 && j_kiri<=15 && j_belakang<=15 )
{
    delay(2000);
    digitalWrite(led1, LOW);
    digitalWrite(led2, LOW);
    Serial.println("PARKIR A : S1SALAH");
    Serial.println("          ");
    Serial.println("PARKIR B : SALAH");
    beep(500);
    delay(100);
}
//PARKIR AB.2,3,4
else if (j_kanan>=16 && j_depan<=15 && j_kiri<=15 && j_belakang<=15 )
{
    delay(2000);
    digitalWrite(led1, LOW);
    digitalWrite(led2, LOW);
    Serial.println("PARKIR A : S2SALAH");
    Serial.println("          ");
    Serial.println("PARKIR B : SALAH");
    beep(500);
    delay(100);
}

```

```
//Bebas
else if (j_kanan>=16 && j_depan>=16 && j_kiri>=16 && j_belakang>=16 )
{
    delay(2000);
    //digitalWrite(led2, LOW);

    Serial.println("PARKIR A :    BENAR");
    Serial.println("                ");
    Serial.println("PARKIR B :    BENAR");
    delay(100);
}

digitalWrite(led1, HIGH);
digitalWrite(led2, HIGH);
analogWrite(buzzerPin, 0);

}
```

