```cpp
#include <VarSpeedServo.h>
VarSpeedServo myservo;  // create servo object to control a servo
int threshold = 5000;
const int pwPin1 = 9;
const int pwPin2 = 10;
long sensor1;
long sensor2;
bool fwd = false;
int pos = 90;
int servoSpeed = 20;

void setup() {
  Serial.begin(9600);
  pinMode(pwPin1, INPUT);
  myservo.attach(3);   // attaches the servo on pin 9 to the servo object
  myservo.write(90, servoSpeed);                    // tell servo to go to position in
variable 'pos'
}

void read_sensor () {
  sensor1 = pulseIn(pwPin1, HIGH);
  sensor2 = pulseIn(pwPin2, HIGH);
}

void print_range() {
  Serial.print("S1");
  Serial.print("=");
  Serial.print(sensor1);
  Serial.print("   S2");
  Serial.print("=");
  Serial.println(sensor2);
}

void loop() {
  if (sensor1 < threshold)
  {
    // moveServo(0);
    myservo.write(50, servoSpeed);                   // tell servo to go to position
in variable 'pos'
  }
  else if (sensor2 < threshold)
  {
    //moveServo(180);
    myservo.write(130, servoSpeed);
  }
```

```
  else if (sensor2 < threshold && sensor1 < threshold)
  {
    // do something?
  }
  else
  {
    //moveServo(90);
    myservo.write(90, servoSpeed);
  }
  read_sensor();
  //  print_range();

  delay(100);
}
```