```
//code uses two switches in order to detect an obstacle or
// then turns right after going back shortly each time

#include "AFMotor.h"
#include <Servo.h>

AF_DCMotor motor1(1, MOTOR12_64KHZ);
AF_DCMotor motor2(2, MOTOR12_64KHZ);
Servo servoHEAD;
const int ledRED = 18;// choose the pin for the LED
const int ledBLUE = 19;
const int inputLEFT = 16;// choose the input pin (for a p
const int inputRIGHT = 17;

void setup() {
  pinMode(ledRED, OUTPUT); // declare LED as output
  pinMode(ledBLUE, OUTPUT);
  pinMode(inputLEFT, INPUT); // declare pushbutton as inpu
  pinMode(inputRIGHT, INPUT);
  motor1.setSpeed(170);
  motor2.setSpeed(170);
}

void loop() {
  motor1.run(BACKWARD);
  motor2.run(BACKWARD);

  int val1 =digitalRead(inputLEFT); // read input value
  int val2 =digitalRead(inputRIGHT);
  if (val1 ==HIGH) // check if the input is HIGH
  {
    motor1.run(RELEASE);
    motor2.run(RELEASE);
    digitalWrite(ledRED, HIGH); // turn LED on if switch i
    motor2.run(BACKWARD);
    motor1.run(FORWARD);
    delay(500);
  }
  else
```

```
  {
    servoHEAD.write(90);
    digitalWrite(ledRED, LOW); // turn LED off
  }

  if (val2  ==HIGH) // check if the input is HIGH
  {
    motor1.run(RELEASE);
    motor2.run(RELEASE);
    digitalWrite(ledBLUE, HIGH); // turn LED on if switch
    motor1.run(BACKWARD);
    motor2.run(FORWARD);
    delay(500);
  }
  else
  {
    servoHEAD.write(90);
    digitalWrite(ledBLUE, LOW); // turn LED off
  }
}
```