ORG 0H

MOV P1, #00H ; Initialize port 1 as output

MOV P2, #00H ; Initialize port 2 as output

MAIN:

MOV A, P3 ; Read the status of IR sensor 1

JB ACC.0, CHECK\_IR2 ; If IR sensor 1 is blocked, check IR sensor 2

JNB ACC.0, OPEN\_GATE ; If IR sensor 1 is not blocked, open the gate

CHECK\_IR2:

MOV A, P3 ; Read the status of IR sensor 2

JB ACC.0, CLOSE\_GATE ; If IR sensor 2 is blocked, close the gate

JNB ACC.0, MAIN ; If IR sensor 2 is not blocked, go back to main

CLOSE\_GATE:

SETB P2.0 ; Set the motor driver to close the gate

SETB P2.1 ; Set the red light on

SETB P2.2 ; Set the buzzer on

JMP MAIN

OPEN\_GATE:

CLR P2.0 ; Clear the motor driver to open the gate

CLR P2.1 ; Clear the red light

CLR P2.2 ; Clear the buzzer

JMP MAIN

END