

SRT

Code :

```
#include <Arduino.h>
//define pins
#define TRIG_PIN 7
#define ECHO_PIN 6
#define PUMP_PIN 15

// define variables
unsigned long duration;
int distance;
void setup()
{
    pinMode(TRIG_PIN, OUTPUT);
    pinMode(ECHO_PIN, INPUT);
    pinMode(PUMP_PIN, OUTPUT); // relay pin
    digitalWrite(PUMP_PIN, LOW); // off pump

    Serial.begin(115200);
    Serial.println("شروع برنامه");
}

void loop()
{
    // send pulse to sensor
    digitalWrite(TRIG_PIN, LOW);
    delayMicroseconds(2);
    digitalWrite(TRIG_PIN, HIGH);
    delayMicroseconds(10);
    digitalWrite(TRIG_PIN, LOW);
    // read Echo
    duration = pulseIn(ECHO_PIN, HIGH);
    distance = duration * 0.034 / 2;
    // calculate distance
    Serial.print("Distance: ");
    Serial.print(distance);
    Serial.println(" cm");

    // detect person
    if (distance < 10)
    { // اگر فاصله کمتر از ۱۵ سانت بود
        digitalWrite(PUMP_PIN, HIGH);
    }
}
```

```
else if(distance>14)
{
    digitalWrite(PUMP_PIN,LOW);
}
delay(200);
}
```

Schematic :

