

**Project script**

* At first, assume you have a home that you need to enter garden.

* **You need to control the opening and closing process of the main door of a home using Two IR sensors** (one on each side of the door) to detect if someone is near the door and open the door in the opposite direction of the person (use a servo motor to control the door).
* Secondly, assume you have a home that you need to keep secure.
  + **required to give access to the whole home** (use a keypad to enter the password) :
    - **If you enter a wrong password :** turn on an alarm (use buzzer) and print “Wrong password“ on LCD until you enter the correct password
    - **If you enter a correct password :** turn on a green LED and print

“Welcome Home “ on LCD.

* Third, if you enter the correct password,
  + **Use a temperature sensor to control the temperature** to stay less than 25 °c (or any suitable threshold):
    - **If the temperature is more than the threshold :** turn on a fan (use a dc motor) until the temperature is below 25°c (the threshold) and then turn off the fan.
    - **If the temperature is more than 35°c (another threshold) :** turn on an alarm (use another buzzer) and turn it off manually (use a push button)

**Note:** Print the temperature on LCD in all the previous case

* Use LDR to control 2 LEDs brightness level according to the sunlight

and print the LEDS brightness level on LCD

Note

* + You can use analog pins as a digital output
  + You can use keypad with 2 rows\*2 columns only