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 keypadto 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