## Q5) <u>HOME AUTOMATION</u>

We want a home in which all the electrical appliances (Lights, Fan, Fire Alarm, Automated doors) automized using Arduino.

- a) Fan (can use DC motor to represent Fan) should be in ON state when temperature is above threshold (can set it to halt), otherwise will be in OFF state.
- b) Lights (can use Light Bulbs to represent Light) should be in ON state if room gets dark.
- c) Fire alarm ( can use Gas sensor to sense smoke ) will buzz when it detects smoke in its premises.
- d) Automated doors ( can use Servo motor to represent door ). Servo should rotate 90 degree clockwise when it detects object in its range and if object moves out of its range, then it has to rotate 90 degree counter-clockwise.(can use ultrasonic sensor)