ULTRA CHEEP HOME AUTOMATION UNDER $5

By vina1991 in CircuitsElectronics

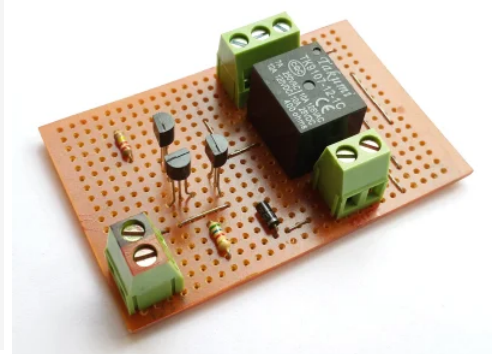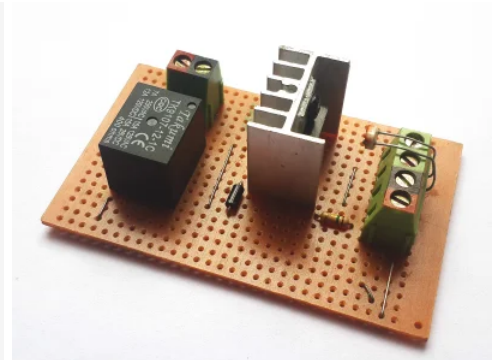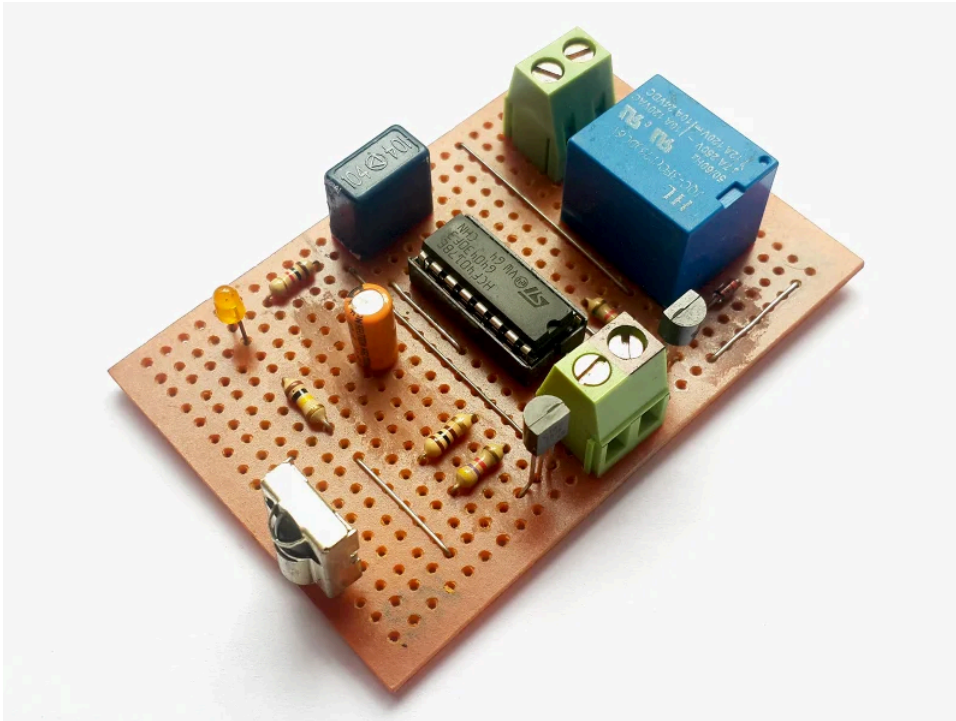## Introduction: ULTRA CHEEP HOME AUTOMATION UNDER $5

Hello friends

Today I am back with another project called ultra cheep home automation under $5

Home automation means you can control home applies more easily. You can control your fan lights exits' with tip of your finger or allow them to work automatically

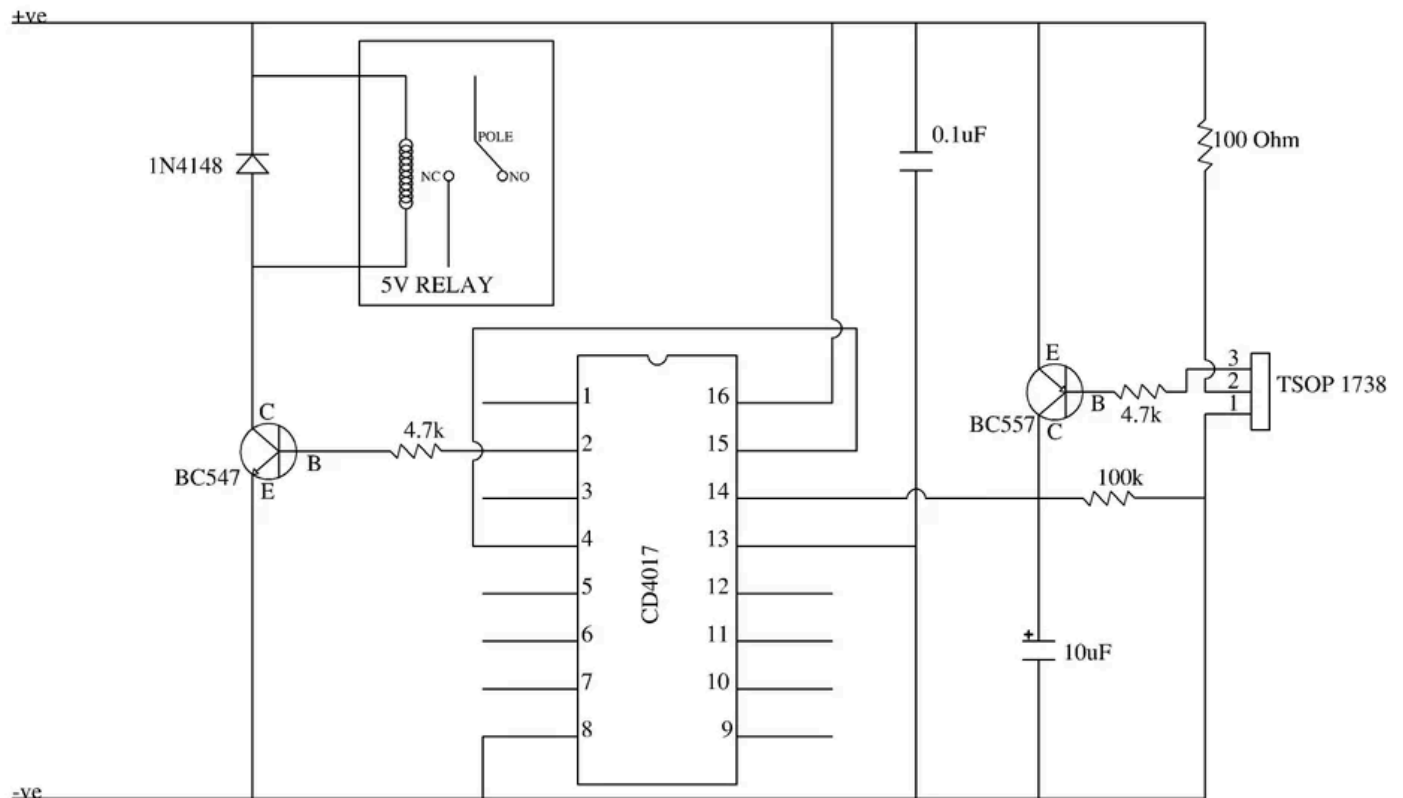The project contains three different switching circuits

1. IR remote controlled switch

2. Automatic water level controller

3. Automatic night light

Step 1: My Goal

"To make a cheap and efficient home automation circuits under $5"

Step 2: The Circuit :IR REMOTE CONTROLLED SWITCH

This is the driving circuit of the **IR remote controlled switch**

To make this circuit you need

1. BC 547 & BC 558 Transistors = 9 INR

2. CD4017 IC & 16 Pin IC holder = 15

3. TSOP 1738 = 17

4. 100 Ohm resistor = 0.50

5. 100K Ohm resistor = 0.50

6. 4.7 K Ohm resistors x2 = 1

7. 10uf Electrolytic Capacitor = 10

8. 0.1uF Film Box Capacitor = 5

9. 1N4148 Diode High-speed diode = 2

10. 5V relay = 20

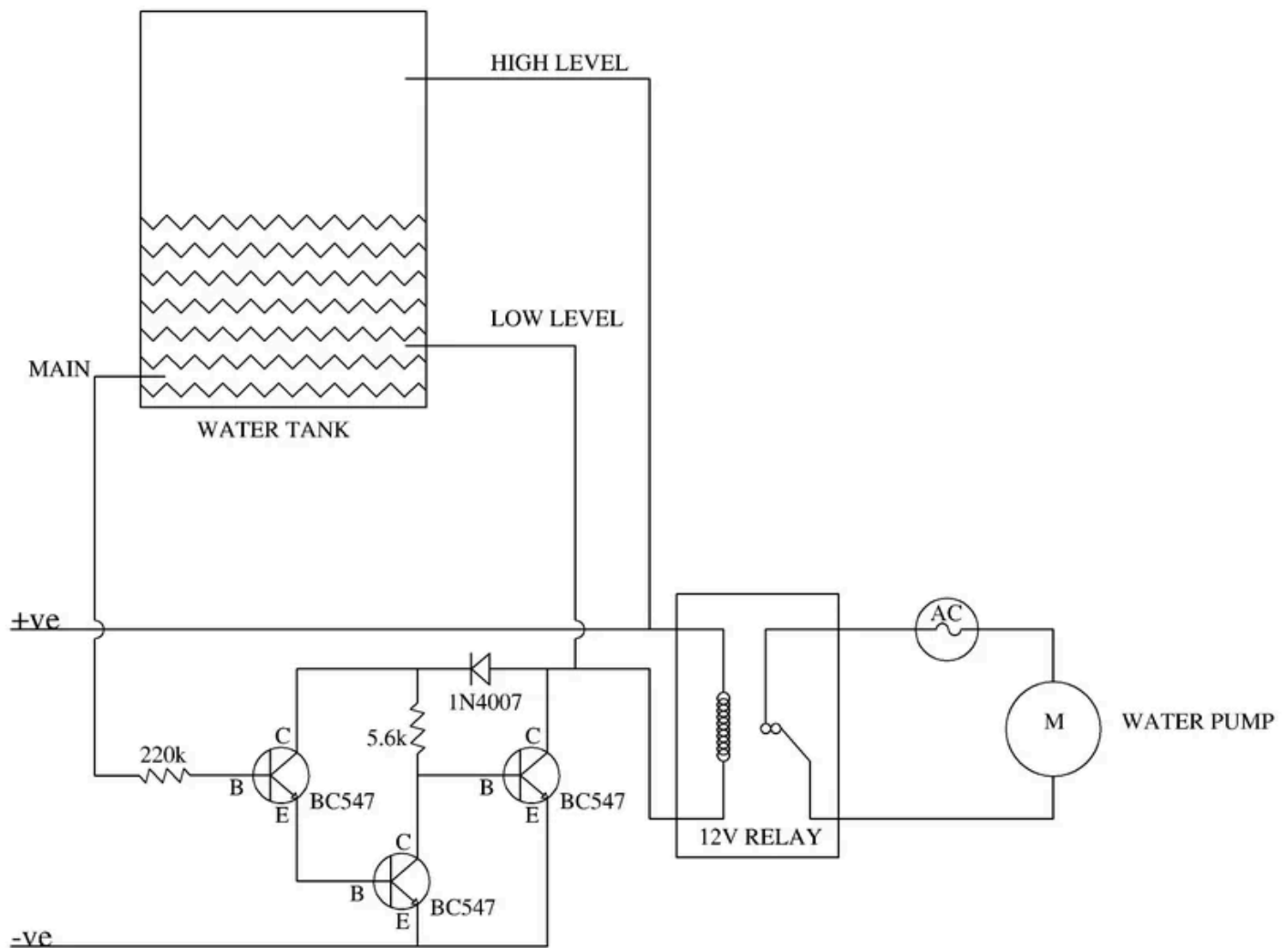11. 2-Pin PCB connector x2 = 10

12. Wires = 5

13. PCB = 10

Total = 105 INR

Total cost of this circuit is equals to 105Rs or 105INR (70 INR = 1 USD).that means this circuit is under $5 budget

Step 3: The Circuit :AUTOMATIC WATER LEVEL CONTROLLER

AUTOMATIC WATER LEVEL CONTROLLER

This is the driving circuit of the **Automatic water level controller**
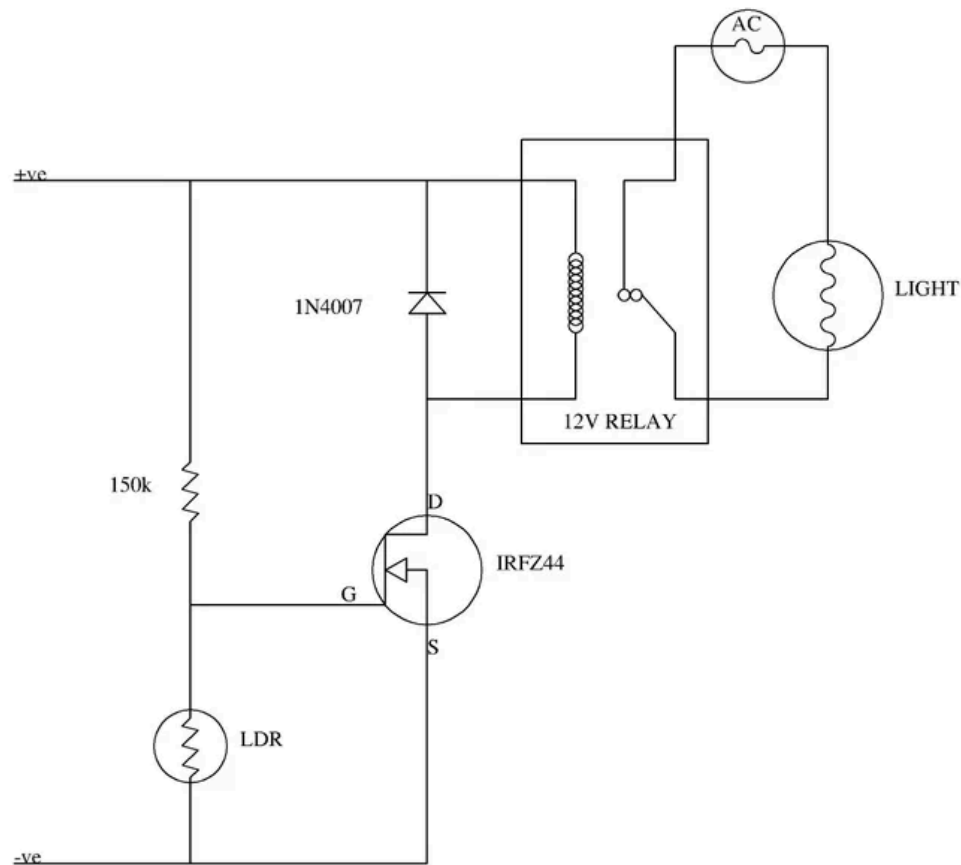
To make this circuit you need

1. BC 547 Transistor X 3 = 9 INR

2. 220 K Ohm & 5.4 K Ohm resistors = 1

3. 1N4007 Diode = 1

4. 12V relay = 12

5. One, 3-pin PCD connector & two, 2-Pin PCB connector = 25

6. Wires = 5

7. PCB = 10

Total = 66 INR

Total cost of this circuit is equals to 66Rs or 66INR (70 INR = 1 USD).that means this circuit is under $5 budget

Step 4: The Circuit : AUTOMATIC NIGHT LIGHT

AUTOMATIC AC NIGHT LIGHT

This is the driving circuit of the **Automatic night light**

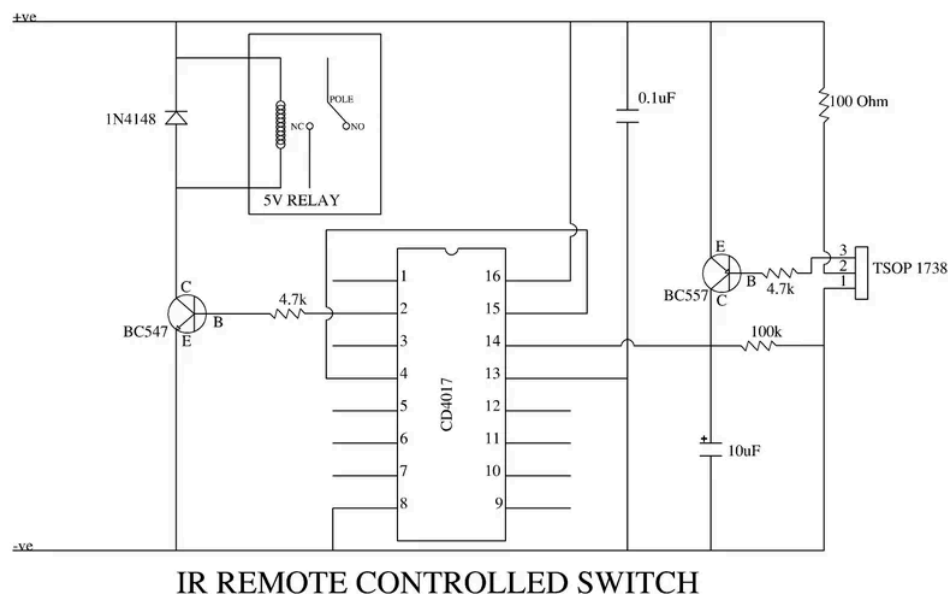To make this circuit you need

1. IRFZ44 MOFSET = 17 INR

2. 150 K Ohm resistor = 0.50

3. LDR = 2

4. 1N4007 Diode = 1

5. 12V relay = 12

6. 2-Pin PCB connector X 3 = 25

7. Wires = 5
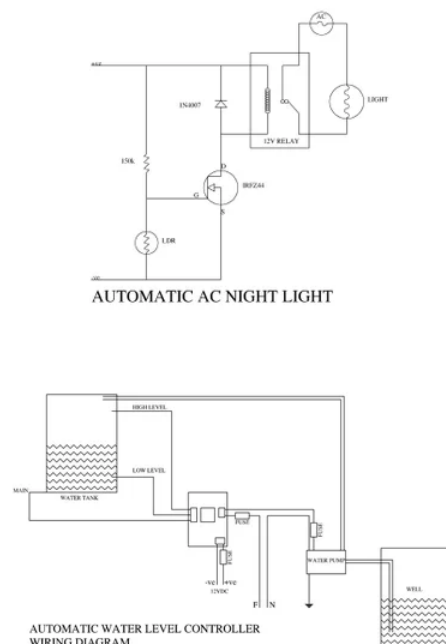
8. PCB = 10

Total = 72.50 INR

Total cost of this circuit is equals to 72.50Rs or 72.50 INR (70 INR = 1 USD).that means this circuit is under $5 budget

Total cost of the these circuits are under 5$ budget

Step 5: Fitting and Wiring

IR REMOTE CONTROLLED SWITCH need an 5 V DC to operate.you can use any IR blaster as switch

AUTOMATIC WATER LEVEL CONTROLLER need 12V DC to operate.you can control any water pump Max load is 1.4kW).use stainless steel bolts as sensor

AUTOMATIC NIGHT LIGHT need 12v DC to operate

Step 6: The Moment of Truth

this is the video of IR REMOTE CONTROLLED SWITCH (Video 1)

this is the video of AUTOMATIC WATER LEVEL CONTROLLER(Video 2)

this is the video of AUTOMATIC NIGHT LIGHT(Video 3)

for more details about AUTOMATIC WATER LEVEL CONTROLLER "www.instructables.com/id/1-AUTOMATIC-WATER-LEVEL-C...

for more details about AUTOMATIC NIGHT LIGHT "www.instructables.com/id/AUTOMATIC-SOLAR-PO...