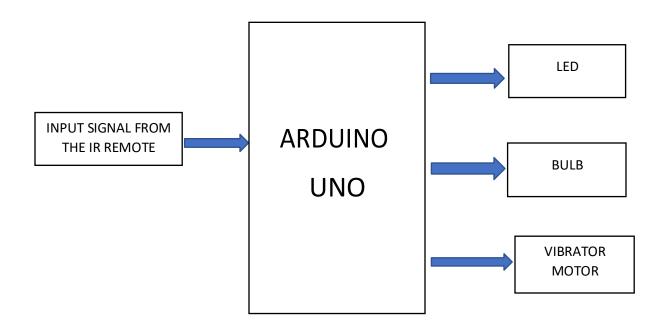
ASSIGNMENT-01 SMART HOME AUTOMATION

CONCEPT:

- Here, the led, bulb and the vibrator motor are turned on using the IR remote
- For each element to be turned on different numbers are used on the remote.
- An IR temperature sensor is also used
- It is coded in such away that different elements are operated when the signal is passed from the remote.

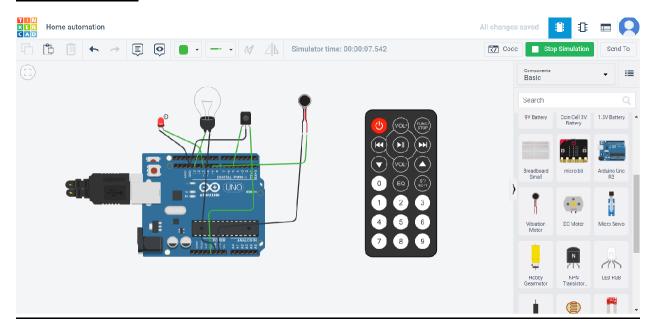
BLOCK DIAGRAM:



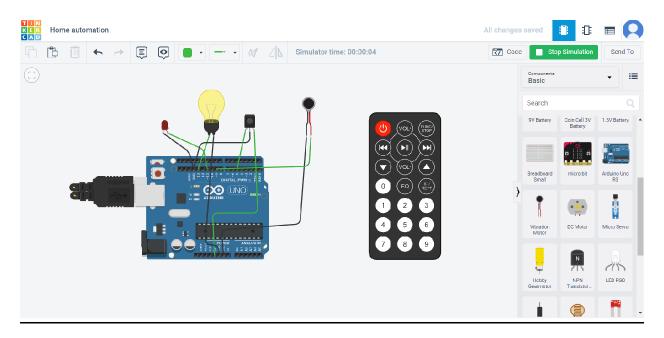
CODE:

```
#include <IRremote.h>
int RECV_PIN = 5;
int i=0;
int j=0;
int k=0;
IRrecv irrecv(RECV_PIN);
decode_results results;
void setup() {
Serial.begin(9600);
irrecv.enableIRIn();
pinMode(13,OUTPUT);
 pinMode(9,OUTPUT);
 pinMode(11,OUTPUT);
void loop() {
 //digitalWrite(13,LOW);
 if (irrecv.decode(&results)) {
  Serial.println(results.value, HEX);
  if(results.value==0xFD30CF)
    i++;
    int x=i\%2;
   digitalWrite(13,x);
  else if(results.value==0xFD08F7)
    j++;
    int y=j\%2;
   digitalWrite(9,y);
  else if(results.value==0xFD8877)
    k++;
    int z=k\%2;
   digitalWrite(11,z);
  irrecv.resume();
 delay(100);
```

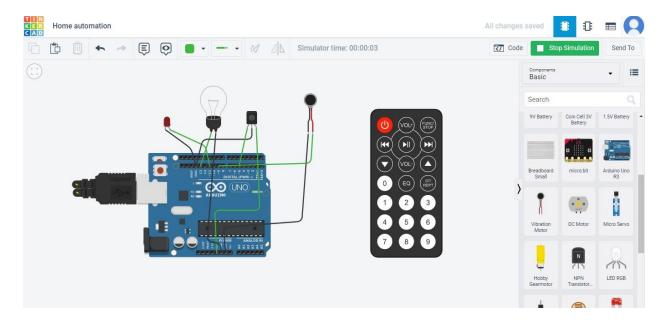
<u>OUTPUT:</u>



LED is glown when 2 is pressed in remote



Bulb is blown when 0 is pressed in remote



when no input is given