**Assignment -1**

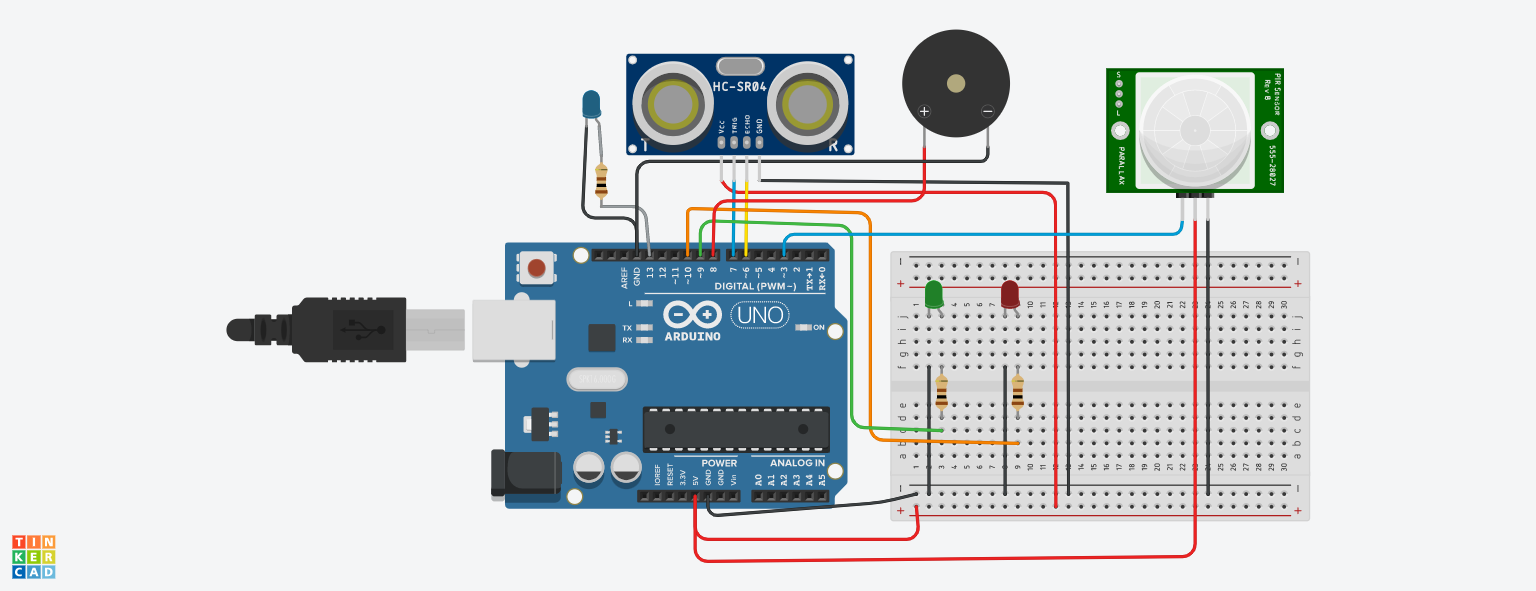
Python Programming

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| Assignment Date | 19 September 2022 |
| Student Name | Vaishnavi T |
| Student Roll Number | 713319IT055 |
| Maximum Marks | 2 Marks |

Question:

Make a smart home with 2-3 sensors, LED , Buzzer in single code and connections.

**Circuit:**



Program code:

#define Trigpin 7

#define Echopin 8

#define low\_led 9

#define high\_led 10

float distance;

int duration;

int ll = 700;

void setup() {

pinMode (Trigpin, OUTPUT);

pinMode (low\_led, OUTPUT);

pinMode (high\_led, OUTPUT);

pinMode (Echopin, INPUT);

Serial.begin(9600);

Serial.println ("Welcome To Distance Meter");

Serial.println ("Coded By Jevins Annson");

digitalWrite (low\_led, LOW);

digitalWrite (high\_led, LOW);

}

void loop() {

digitalWrite(Trigpin, LOW);

delayMicroseconds(2);

digitalWrite(Trigpin, HIGH);

delayMicroseconds(10);

digitalWrite(Trigpin, LOW);

duration = pulseIn(Echopin, HIGH);

distance = duration \* 0.034 / 2;

delay (ll);

Serial.println (" ");

Serial.print ("Distance = ");

Serial.print (distance);

Serial.print (" CM");

Serial.println (" ");

if (distance>=30)

{

Serial.println ("Nobody Is Infront Of the Sensor");

digitalWrite (low\_led, HIGH);

delay (500);

digitalWrite (low\_led, LOW);

delay (500);

digitalWrite (low\_led, HIGH);

}

else

{

Serial.println ("Someone Is Infront Of the Sensor");

digitalWrite (high\_led, HIGH);

delay (100);

digitalWrite (high\_led, LOW);

delay (100);

digitalWrite (high\_led, HIGH);

delay (100);

}

}