## Smart Home Automation System Assignment 1

```
int motor=4;
int pir=7;
int echo=5;
int trigg=6;
int pir_led=12;
int us_led=13;
int time;
int dist;
void setup()
Serial.begin(9600);
pinMode(pir_led,OUTPUT);
pinMode(us_led,OUTPUT);
pinMode(motor,OUTPUT);
pinMode(pir,INPUT);
pinMode(echo,INPUT);
pinMode(trigg,OUTPUT);
}
void loop()
{
if(digitalRead(pir)==HIGH){
  Serial.println("There is a person...");
  digitalWrite(pir_led,HIGH);
  delay(1000);
}
 digitalWrite(pir_led,LOW);
digitalWrite(trigg,HIGH);
 delayMicroseconds(10);
 digitalWrite(trigg,LOW);
```

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```
time=pulseIn(echo,HIGH);
 dist=(time*0.034)/2;
if(dist<=100)
{
 Serial.println("A personNear...");
  digitalWrite(us_led,HIGH);
  digitalWrite(motor,HIGH);
  delay(1000);
}
else
{
  digitalWrite(us_led,LOW);
  digitalWrite(motor,LOW);
  delay(1000);
}
}
```

