

SMART HOME (AUTOMATIC DOOR OPENER)

SOURCE CODE:

```
#define PIR_sensor 14
#define m11 0
#define m12 1
void setup()
{
  lcd.begin(16, 2);
  pinMode(m11, OUTPUT);
  pinMode(m12, OUTPUT);
  pinMode(PIR_sensor, INPUT);
  lcd.print(" Automatic ");
  lcd.setCursor(0,1);
  lcd.print(" Door Opener ");
  delay(3000);
  lcd.clear();
  lcd.print("Python for fun");
  delay(2000);
}
void loop()
{
  if(digitalRead(PIR_sensor))
  {
    lcd.setCursor(0,0);
    lcd.print("Movement Detected");
    lcd.setCursor(0, 1);
    lcd.print(" Gate Opened ");
    digitalWrite(m11, HIGH); // gate opening
    digitalWrite(m12, LOW);
    delay(1000);
    digitalWrite(m11, LOW); // gate stop for a while
    digitalWrite(m12, LOW);

    delay(1000);
    lcd.clear();
    lcd.print(" Gate Closed ");
    digitalWrite(m11, LOW); // gate closing
    digitalWrite(m12, HIGH);
    delay(1000);
    digitalWrite(m11, LOW); // gate closed
    digitalWrite(m12, LOW);
    delay(1000);
  }
}
```

```
else
{
  lcd.setCursor(0,0);
  lcd.print(" No Movement ");
  lcd.setCursor(0,1);
  lcd.print(" Gate Closed ");
  digitalWrite(m11, LOW);
  digitalWrite(m12, LOW);
}
}
```

OUTPUT:

