

CODE

```
#include<SoftwareSerial.h>

#include<Servo.h>

#define gateSwitch A4

#define buzzer A5

SoftwareSerial Sim800L(4,5);

String command="";

Servo gate;

unsigned long currentTime=0,previousTime=0;

bool openGate=false;

void setup()

{

    gate.attach(A3);

    gate.write(0);

    delay(1000);

    gate.detach();

    pinMode(gateSwitch,INPUT);

    pinMode(buzzer,OUTPUT);

    digitalWrite(buzzer,LOW);

    Sim800L.begin(9600);

    Serial.begin(9600);

}

void loop()

{

    if(digitalRead(gateSwitch)==HIGH)

    {

        digitalWrite(buzzer,HIGH);
```

```
sendSMS("ALert!! Someone is trying to open door lock!!");
while(digitalRead(gateSwitch)==HIGH)
{
    delay(10);
}
}
if(openGate)
{
    currentTime=millis();
    while(millis()-currentTime<5000)
    {
        if(digitalRead(gateSwitch)==HIGH)
        {
            digitalWrite(buzzer,LOW);
            gate.attach(A3);
            for(int i=0;i<=90;i++)
            {
                gate.write(i);
                delay(20);
            }
            delay(1000);
            gate.detach();
            openGate=false;
            Serial.println("Door opened.");
            sendSMS("You have unlocked the door.");
            while(digitalRead(gateSwitch)==HIGH)
            break;
        }
    }
}
```

```
    delay(10);
}
if(openGate)
{
    Serial.println("Command Cancelled");

    sendSMS("Command was received to open the door lock but unlock button wasn't
pressed in 5 seconds of time period");

    openGate=false;
}
}
if(Serial.available()>0)
{
    char c=Serial.read();
    command=command+c;
    delay(10);
    if(command.length()==4)
    {
        if(command=="1234")
        {openGate=true;}
        else if(command=="4321")
        {
            openGate=false;
            gate.attach(A3);
            for(int i=90;i>0;i--)
            {
                gate.write(i);
                delay(10);
            }
        }
    }
}
```

```
    delay(1000);
    gate.detach();
    Serial.println("Door Closed.");
}
command="";
}
}
}
void sendSMS(String sms)
{
    Serial.println(sms);
    Sim800L.println("AT");
    delay(100);
    Sim800L.println("AT+CMGF=1");
    delay(100);
    Sim800L.println("AT+CMGS=\"+917009854143\""); //Change phone number if
other phone no. is used.
    delay(100);
    Sim800L.print(sms);
    Sim800L.write(26);
    delay(3000);
}
```