```
1    //JDY
2    //RFID, Door Lock, Hello World
3    #include <SPI.h>
4    #include <MFRC522.h>
5    #include <Servo.h>
6    #include <LiquidCrystal.h>
7
8    #define SS_PIN 53
9    #define RST_PIN 5
10   #define LED_G 3 //define green LED pin
11   #define LED_R 2 //define red LED
12   #define BUZZER 6 //buzzer pin
13   MFRC522 mfrc522(SS_PIN, RST_PIN);    // Create MFRC522 instance.
14   Servo myServo; //define servo name
15
16   // initialize the library with the numbers of the interface pins
17   LiquidCrystal lcd(7, 8, 9, 10, 11, 12);
18
19   void setup()
20   {
21     Serial.begin(9600);    // Initiate a serial communication
22     SPI.begin();        // Initiate  SPI bus
23     mfrc522.PCD_Init();    // Initiate MFRC522
24     myServo.attach(4); //servo pin
25     myServo.write(180); //servo start position
26     pinMode(LED_G, OUTPUT);
27     pinMode(LED_R, OUTPUT);
28     pinMode(BUZZER, OUTPUT);
29     noTone(BUZZER);
30
31
32   // set up the LCD's number of columns and rows:
33     lcd.begin(16, 2);
34   // Print a message to the LCD.
35     lcd.print("Money Talks!");
36     lcd.setCursor(0,1);
37     lcd.print("BS Walks!");
38
39   }
40   void loop()
41   {
42     // Look for new cards
43     if ( ! mfrc522.PICC_IsNewCardPresent())
44     {
45       return;
46     }
47     // Select one of the cards
48     if ( ! mfrc522.PICC_ReadCardSerial())
49     {
50       return;
51     }
52     //Show UID on serial monitor
53
54     String content= "";
55     byte letter;
56     for (byte i = 0; i < mfrc522.uid.size; i++)
57     {
58         Serial.print(mfrc522.uid.uidByte[i] < 0x10 ? " 0" : " ");
59         Serial.print(mfrc522.uid.uidByte[i], HEX);
60         content.concat(String(mfrc522.uid.uidByte[i] < 0x10 ? " 0" : " "));
61         content.concat(String(mfrc522.uid.uidByte[i], HEX));
62     }
63
64     content.toUpperCase();
```

```
65      if (content.substring(1) == "29 28 4C D3") //change here the UID of the card/cards that you
        want to give access
66      {
67
68        delay(500);
69        digitalWrite(LED_G, HIGH);
70        tone(BUZZER, 500);
71        delay(500);
72        noTone(BUZZER);
73        myServo.write(0);
74        delay(8000);
75        myServo.write(180);
76        digitalWrite(LED_G, LOW);
77      }
78
79    else    {
80
81        digitalWrite(LED_R, HIGH);
82        tone(BUZZER, 300);
83        delay(1000);
84        digitalWrite(LED_R, LOW);
85        noTone(BUZZER);
86      }
87    }
```