

This custom function will print a message that the alarm is activated and that we need to enter a password in order to stop the alarm. So using the next while loop we are constantly checking whether we have pressed a button on the keypad, and each button press is added to the tempPassword variable. If we enter more than 4 digits or press the sharp button the previously entered digits will be cleared so we can type them again from begin.

```
1. void enterPassword() {
2.   int k=5;
3.   tempPassword = "";
4.   activated = true;
5.   lcd.clear();
6.   lcd.setCursor(0,0);
7.   lcd.print(" *** ALARM *** ");
8.   lcd.setCursor(0,1);
9.   lcd.print("Pass>");
10.  while(activated) {
11.    keypressed = myKeypad.getKey();
12.    if (keypressed != NO_KEY){
13.      if (keypressed == '0' || keypressed == '1' || keypressed == '2' || keypressed == '3' ||
14.        keypressed == '4' || keypressed == '5' || keypressed == '6' || keypressed == '7' ||
15.        keypressed == '8' || keypressed == '9') {
16.        tempPassword += keypressed;
17.        lcd.setCursor(k,1);
18.        lcd.print("");
19.        k++;
20.      }
21.    }
22.    if (k > 9 || keypressed == '#') {
23.      tempPassword = "";
24.      k=5;
25.      lcd.clear();
26.      lcd.setCursor(0,0);
27.      lcd.print(" *** ALARM *** ");
28.      lcd.setCursor(0,1);
29.      lcd.print("Pass>");
30.    }
31.    if ( keypressed == '*' ) {
32.      if ( tempPassword == password ) {
33.        activated = false;
34.        alarmActivated = false;
35.        noTone(buzzer);
36.        screenOffMsg = 0;
37.      }
38.      else if (tempPassword != password) {
39.        lcd.setCursor(0,1);
40.        lcd.print("Wrong! Try Again");
41.        delay(2000);
42.        lcd.clear();
43.        lcd.setCursor(0,0);
44.        lcd.print(" *** ALARM *** ");
45.        lcd.setCursor(0,1);
46.        lcd.print("Pass>");
```

47. }

48. }

49. }

50. }