

In that case on the LCD we will print the message “Alarm will be activated in”, and using a while loop we will make a countdown of 9 seconds before the alarm is activated. Then the message “Alarm Activated” will appear and we will measure the initial distance from our alarm device to the objects opposite of it.

```
1.  if (activateAlarm) {
2.    lcd.clear();
3.    lcd.setCursor(0,0);
4.    lcd.print("Alarm will be");
5.    lcd.setCursor(0,1);
6.    lcd.print("activated in");
7.
8.    int countdown = 9; // 9 seconds count down before activating the alarm
9.    while (countdown != 0) {
10.   lcd.setCursor(13,1);
11.   lcd.print(countdown);
12.   countdown--;
13.   tone(buzzer, 700, 100);
14.   delay(1000);
15. }
16. lcd.clear();
17. lcd.setCursor(0,0);
18. lcd.print("Alarm Activated!");
19. initialDistance = getDistance();
20. activateAlarm = false;
21. alarmActivated = true;
22. }
```