In the setup section, we just need to initialize the LCD and define the pin modes for the buzzer and the ultrasonic sensor.

In the loop section, first we check whether the alarm is activated or not. So if the alarm is not activated, on the LCD we will have the home screen of the program which offers two options, A for activating the alarm and B for changing the password. Then using the myKeypad.getKey() function we read which button from the keypad has been pressed and if that's the button A, the buzzer will produce a 200 milliseconds sound and the activateAlarm variable will become true.

```
1.  if (!alarmActivated) {
2.  if (screenOffMsg == 0 ){
3.  lcd.clear();
4.  lcd.setCursor(0,0);
5.  lcd.print("A - Activate");
6.  lcd.setCursor(0,1);
7.  lcd.print("B - Change Pass");
8.  screenOffMsg = 1;
9.  }
10. keypressed = myKeypad.getKey();
11. if (keypressed =='A'){ //If A is pressed, activate the alarm
12. tone(buzzer, 1000, 200);
13. activateAlarm = true;
14. }
```