

Write an MPASM program for the PIC16F887 Microcontroller that interfaces to a 4x4 matrix keypad.

Use a polling scheme to detect which key is pressed.

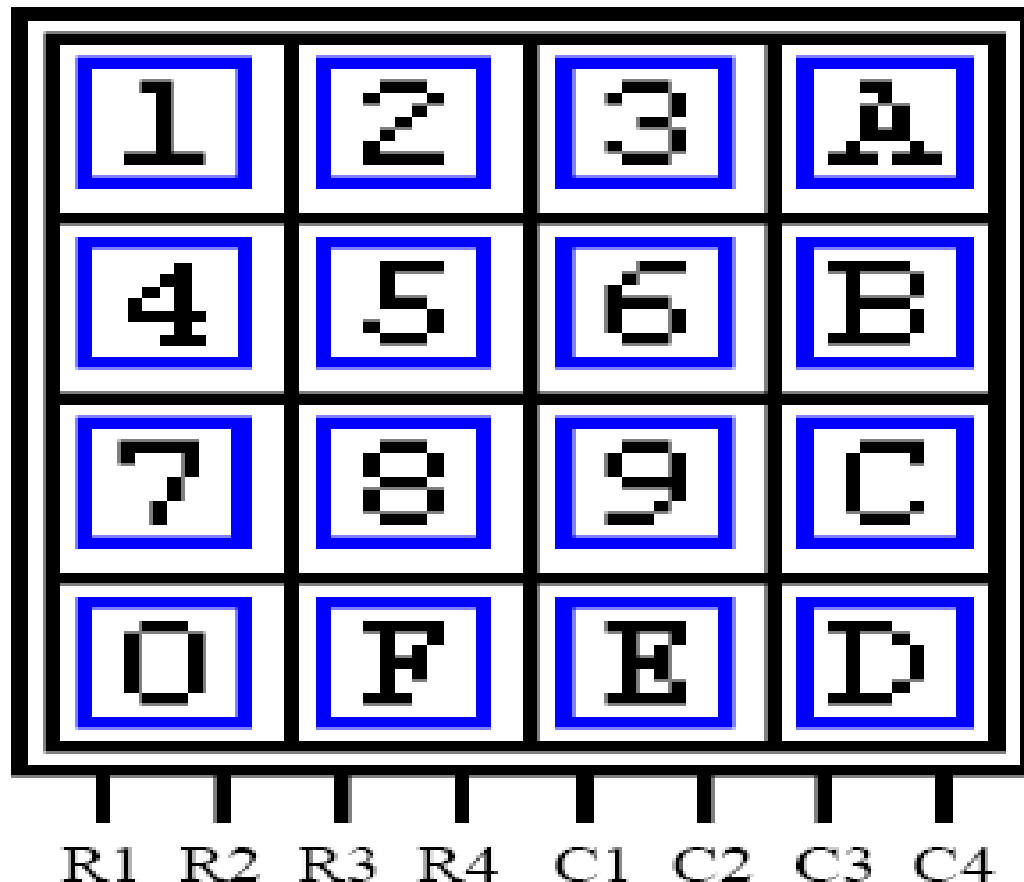
Use a 7-segment display to display the value entered on the keypad.

Use a look up table to hold the codes displayed on the 7-segment.

APPROVED



### 4x4 MATRIX KEYPAD PIN CONFIGURATION



1 - R1+C1  
4 - R1+C2  
7 - R1+C3  
0 - R1+C4

2 - R2+C1  
5 - R2+C2  
8 - R2+C3  
F - R2+C4

3 - R3+C1  
6 - R3+C2  
9 - R3+C3  
E - R3+C4

A - R4+C1  
B - R4+C2  
C - R4+C3  
D - R4+C4