

Algorithm

1. Switch on the system.
2. SCAN each row to check if any key is pressed.
3. If yes, then go to step 5.
4. If no, then go to step 2.
5. Once the row is identified, now scan each column to identify the key pressed.
6. If row 1 and column 1 identified, then display '0' on Seven – Segment Display.
7. If row 1 and column 2 identified, then display '4' on Seven – Segment Display.
8. If row 1 and column 3 identified, then display '8' on Seven – Segment Display.
9. If row 1 and column 4 identified, then display '0' on Seven – Segment Display.
10. If row 2 and column 1 identified, then display '1' on Seven – Segment Display.
11. If row 2 and column 2 identified, then display '5' on Seven – Segment Display.

12. If row 2 and column 3 identified, then display '9' on Seven – Segment Display.
13. If row 2 and column 4 identified, then display 'D' on Seven – Segment Display.
14. If row 3 and column 1 identified, then display '2' on Seven – Segment Display.
15. If row 3 and column 2 identified, then display '6' on Seven – Segment Display.
16. If row 3 and column 3 identified, then display 'A' on Seven – Segment Display.
17. If row 3 and column 4 identified, then display 'E' on Seven – Segment Display.
18. If row 4 and column 1 identified, then display '3' on Seven – Segment Display.
19. If row 4 and column 2 identified, then display '7' on Seven – Segment Display.
20. If row 4 and column 3 identified, then display 'B' on Seven – Segment Display.
21. If row 4 and column 4 identified, then display 'F' on Seven – Segment Display.
22. Now, go to step 2.