SEVEN SEGMENT DISPLAY DIAGRAM

**D**

**E**

**C**

**G**

**B**

**F**

**A**

SEQUENCE TABLE

|  |  |  |
| --- | --- | --- |
| Digit/Decimal displayed | Active segments | Hex code |
| 0 | A B C D E F X | FC |
| 1 | X B C X X X X | 60 |
| 2 | A B X D E X G | DA |
| 3 | A B C D X X G | F2 |
| 4 | X B C X X F G | 66 |
| 5 | A X C D X F G | B6 |
| 6 | A X C D E F G | BE |
| 7 | A B C X X X X | E0 |
| 8 | A B C D E F G | FE |
| 9 | A B C D X F G | F6 |

NOTE: The “X” symbol denotes that the particular segment is inactive when a particular digit is being displayed.

Also take note that our 7 segment display has 7-Bits pattern while the output port (PORTB) of the PIC has 8-Bits in width. Therefore we can either perform Left-Justification or Right-justification, So in this we opted for Left-Justification meaning our LSB is 0.

PIC16F877A PORTB

A B C D E F G

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  | Not used |

B7 B6 B5 B4 B3 B2 B1 B0