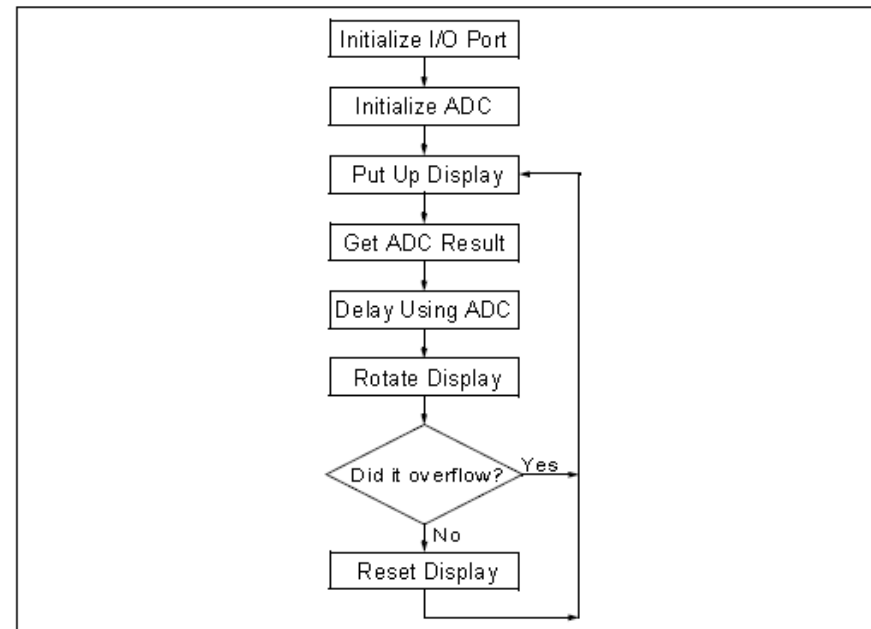


Variable Speed Rotating LED

Variable Rotate

- This lesson combines other lessons by combining other lessons and using the Analog-to-Digital Converter (ADC) to control the speed of rotation.
- Specifics:
 - Use pot input and digitize via ADC
 - Use ADC value to set Delay value of LED update

FIGURE 3-3: VARIABLE SPEED ROTATE PROGRAM FLOW



Exercise

1. Navigate to: C:\EET250\CS2117 course\Lesson 8 VRATELED with Demo Board\vrataLED
2. Open vrataLed.mcp
3. Modify source code to (hint-should be similar to ADC exercise):
 - configure ANSEL
 - configure ADCON0
 - configure ADCON1
 - configure TRISD
4. How is the output of the ADC used for delay?
5. Select debugger-> PICKIT2
6. Make sure Output window shows PICKIT2 ready
7. Build, reprogram, download to PICKIT2
8. Run -> validate operation by varying pot and noticing rotation rate changes
9. If difficulties arise consult with solution folder