

Program Design:

GPIO setup:

- setup LATA
- setup Timer0

Main:

- Heartbeat left running toggling ra7
- run timer

UserAppRun:

- create a static var to keep track of total ms passed
- create static var to keep track of LED position in animation sequence
- create variable to keep track of which direction the LEDs are moving in
- create array of LED states to write to LATA
- create bitmasked var of LATA with 6LSB zero'd out
- count forward and write to LATA every 200ms in an increasing direction through the array
- count backwards and write to LATA every 200ms in a decreasing direction through the array