Dario Rendon

Pre-lab 1

* 1. Initialize opens the physical memory and maps it into the virtual space for the I/O so that we can view/control it
  2. Finalize un maps the virtual space and closes the memory
  3. RegisterRead reads the value of the passed in I/O address
  4. RegisterWrite sets the value of the passed in I/O address

1. */\*\* Changes the state of an LED (ON or OFF)  
   \* @param pBase base address of I/O  
   \* @param ledNum LED number (0 to 7)  
   \* @param state State to change to (ON or OFF)  
   \*/***void** Write1Led(**char** \*pBase, **int** ledNum, **int** state)  
   {  
    **int** ledOffset = 0x4 \* ledNum + gpio\_led1\_offset;  
    RegisterWrite(pBase, ledOffset, state);  
   }
2. */\*\* Reads the value of a switch  
   \* - Uses base address of I/O  
   \* @param pBase base address of I/O  
   \* @param switchNum Switch number (0 to 7)  
   \* @return Switch value read  
   \*/***int** Read1Switch(**char** \*pBase, **int** switchNum)  
   {  
    **int** switchOffset = 0x4 \* switchNum + gpio\_sw1\_offset;  
    **return** RegisterRead(pBase, switchOffset);  
   }