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// -----Title-----
/*
  File: digRead1.ino
  Started: 11/13/13
  Program Description: Read 6 digital pins and
  display results as one variable.
  Circuit: Use 10K pull-down resistors on each
  digital input pin.
*/
// -----Initializations-----

// Include the library code.
#include <LiquidCrystal.h>
// Initialize the library with the numbers of the
// UNO interface pins.
// Syntax: LiquidCrystal(rs, enable, d4, d5, d6, d7)
LiquidCrystal lcd(13, 12, 11, 10, 9, 8);
int sensorValue ;// Declare variable to store the sensor.

void setup(){
  // Set up the LCD's number of columns and rows.
  // Syntax: lcd.begin(cols, rows)
  lcd.begin(16, 2);
  // Use a for loop to initialize pins 2-7 as inputs:
  // Note that pins 0 & 1 are used for serial communications
  // for programming and debugging the Arduino, so changing
  // these pins should usually be avoided unless needed for
  // serial input or output functions. Be aware that this
  // can interfere with program download or debugging.
  for (int thisPin = 2; thisPin < 8; thisPin++) {
    pinMode(thisPin, INPUT);
  }
}
// -----Main Code-----

void loop() {
  int x = 0;
  // Use a for loop to read pins 2-7:

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for (int thisPin = 2; thisPin < 8; thisPin++){
// Read input pins 2-7 and assign value to sensorValue:
sensorValue =digitalRead(thisPin);
// Use bitshift left to move the value of each successive
// sensorValue to the left one column or place:
// Syntax: variable << number_of_bits
sensorValue = sensorValue << (thisPin - 2);
// Add each successive value of sensorValue to x:
x = x + sensorValue;
}
// Print x as binary number
lcd.print(x,BIN);
// Wait 50 ms.
delay(50);
// Clear the LCD screen.
lcd.clear();
}
```