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//
// exercise 13.2rx - http://tronixstuff.com/tutorials > Chapter 13
//
// receive and decode data from tx unit, display in serial monitor
//
// based on code by Mike McCauley 2010 http://www.open.com.au/mikem/arduino
//

// Need these lines below //////////////////////////////////
#include <VirtualWire.h>
#undef int
#undef abs
#undef double
#undef float
#undef round
uint8_t buf[VW_MAX_MESSAGE_LEN]; // this is an array of unsigned integers 8-bits long. In other words,
bytes between 0 and 65535
uint8_t buflen = VW_MAX_MESSAGE_LEN;

////////////////////////////////////
void setup()
{
  // wake up the wireless receiver

  vw_set_ptt_inverted(true); // need this line
  vw_setup(2400);           // sets speed of data reception.
  vw_set_rx_pin(0);        // this is the RX pin number - 0 on a Duemilanove
  vw_rx_start();           // start the receiver!
  Serial.begin(9600);
}

void loop()
{
  // check to see if there is received data in the buffer, and that it came through correctly.
  // if the message didn't come through completely, it will be ignored
  if (vw_get_message(buf, &buflen))
  {
    switch(buf[0])
    {
    case 'a':
      Serial.println("Button 1 low");
      break;
    case 'b':
      Serial.println("Button 1 high");
      break;
    case 'c':
      Serial.println("Button 2 low");
      break;
    case 'd':
      Serial.println("Button 2 high");
      break;
    case 'e':
      Serial.println("Button 3 low");
      break;
    case 'f':
      Serial.println("Button 3 high");
      break;
    case 'g':
      Serial.println("Button 4 low");
      break;
    case 'h':
      Serial.println("Button 4 high");
      break;
    }
  }
}
```

