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//  
// exercise 13.3rx - http://tronixstuff.com/tutorials > Chapter 13  
//  
// control four digital outputs from wireless transmitter system - this sketch uses example 13.2tx for  
// a transmitter  
//  
// 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!  
  pinMode(4, OUTPUT); // LED 4  
  pinMode(6, OUTPUT); // LED 3  
  pinMode(8, OUTPUT); // LED 2  
  pinMode(9, OUTPUT); // LED 1  
  
}  
  
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':  
      digitalWrite(9, LOW);  
      break;  
    case 'b':  
      digitalWrite(9, HIGH);  
      break;  
    case 'c':  
      digitalWrite(8, LOW);  
      break;  
    case 'd':  
      digitalWrite(8, HIGH);  
      break;  
    case 'e':  
      digitalWrite(6, LOW);  
      break;  
    case 'f':  
      digitalWrite(6, HIGH);  
      break;  
    case 'g':  
      digitalWrite(4, LOW);  
      break;  
    case 'h':  
      digitalWrite(4, HIGH);  
    }  
  }  
}
```

