```
  1: #include "derivative.h"      /* derivative-specific definitions */
  2: #include "SCI1.h"
  3: #include "Timer.h"
  4: #include "XBee.h"
  5:
  6: int ok(void) {
  7:   if(SCI1_InChar() != 'O') {
  8:     return 0;
  9:   }
 10:   if(SCI1_InChar() != 'K') {
 11:     return 0;
 12:   }
 13:   if(SCI1_InChar() != 0x0D) {
 14:     return 0;
 15:   }
 16:
 17:   return 1;
 18: }
 19:
 20:
 21: void sendATCommand(char * command) {
 22:   char * temp;
 23:   do {
 24:     temp = command;
 25:     while(*temp) {
 26:       SCI1_OutChar(*temp);
 27:       temp++;
 28:     }
 29:     SCI1_OutChar(0x0D);
 30:     Timer_Wait1ms(20);
 31:   } while(!ok());
 32: }
 33:
 34: /*----------------------XBee_Init----------------------------
 35:   Initialize XBee
 36:   Inputs: none
 37:   Outputs: none */
 38: void XBee_Init(void) {
 39:     SCI1_OutChar('X');
 40:     Timer_Wait10ms(110);
 41:
 42:     SCI1_OutString("+++");
 43:     Timer_Wait10ms(110);
 44:
 45:     sendATCommand("ATDL4F");
 46:     sendATCommand("ATDH0");
 47:     sendATCommand("ATMY4E");
 48:     sendATCommand("ATAP1");
 49:     sendATCommand("ATCN");
 50:     PTP ^= 0x80;
 51: }
 52:
 53: /*----------------------XBee_RecieveTxFrame------------------
 54:   Receives a frame from data in
 55:   Inputs: None
 56:   Outputs: Input Frame */
 57: int XBee_RecieveTxFrame(FrameType * frame)
 58: {
 59:   short i;
 60:   static short FrameID = 1;
 61:
 62:   if(SCI1_InChar() != 0x7E)
 63:   {
 64:     return 0;
 65:   }
 66:
 67:   frame->length = SCI1_InChar();
 68:   frame->length <<= 8;
 69:   frame->length += SCI1_InChar();
 70:
 71:   for(i = 0; i < frame->length; i++)
 72:   {
 73:     frame->data[i] = SCI1_InChar();
 74:   }
 75:
 76:   frame->checkSum = SCI1_InChar();
 77:   frame->frameID = FrameID++;
 78:   return 1;
```

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 79: }
```