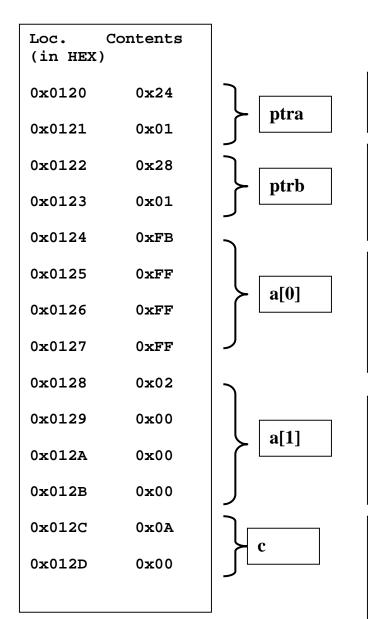
## ECE 3724 Quiz #5 Fall '05 Reese - Solution

After the execution of ALL of the *C* code below, fill in the memory location values. Assume little-endian order for multi-byte values.

```
C code:
signed long *ptra, *ptrb;
signed long a[2];
signed int c;

a[0] = -5;  // specified in decimal!!
a[1] = 2;  // specified in decimal!!
c = 10;  // specified in decimal!!
ptra = &a[0];
ptrb = ptra + 1;
```

;storage for C variables CBLOCK 0x0120 ptra:2, ptrb:2, a:8, c:2 ENDC



$$a[0] = -5$$

$$= 0 - 5$$

$$= 0x00 - 0x05 = 0xFB (8 bits)$$

$$= 0xFF FF FF FB ( sign extended to four bytes, or 32 bits because of long data type)$$

$$a[1] = 2 = +2$$

$$= 0x02 \quad (1 \text{ byte, } 8 \text{ bits})$$

$$= 0x00 \quad 00 \quad 00 \quad 02 \quad (\text{sign extended to four bytes, or } 32 \text{ bits because of } long \text{ data type})$$