

CSE 30 – ARM worksheet 2

Translate the following C code to assembly

C Code	ARM assembly
<pre>// C code /* Assume variables a, b and i have been properly declared as ints as int a; int b; int i; */ for (i = 0 ; i < a; i++){ if(i <= b && a + 1 > 30){ b = a++; } a = --b; } a = b & i; a = 0x12 b = 0x21 a ^= b b ^= a a ^= b</pre>	<pre>/* a is mapped to r0 */ /* b is mapped to r1 */ /* i is mapped to r2 */</pre>