**CSE 30 – ARM worksheet 2**

**Translate the following C code to assembly**

|  |  |
| --- | --- |
| **C Code**  **// 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 | **ARM assembly**  /\* a is mapped to r0 \*/  /\* b is mapped to r1 \*/  /\* i is mapped to r2 \*/ |