```
mul:
void mul(void) {
  link a6,#0
  subq.1 #4,a7
   x = 1;
  moveq #1,d0
  move.w d0, -2(a6)
   if (x < 7) {
  move.w -2(a6),d1
  ext.l d1
  moveq #7,d0
  cmp.1 d0,d1
  bge.s mul+0x4e (0x2000163e) ; 0x2000163e
        for (i = 10; i >= 0; i--) {
  moveq #10,d0
  move.w d0, -4(a6)
  bra.s mul+0x38 (0x20001628) ; 0x20001628
            x = x*2;
  move.w -2(a6),d1
  moveq #2,d0
  muls.w d1,d0
  move.w d0, -2(a6)
       for (i = 10; i >= 0; i--) {
  move.w -4(a6),d0
  ext.1 d0
  subq.1 #1,d0
  move.w d0, -4(a6)
  move.w -4(a6),d0
  ext.1 d0
  tst.1 d0
 bge.s mul+0x20 (0x20001610) ; 0x20001610
   x = x*5;
  move.w -2 (a6), d1
  moveq #5,d0
  muls.w d1,d0
  move.w d0, -2 (a6)
   switch (i) {
 move.w -4(a6),d1
  ext.l d1
  moveq #1,d0
  cmp.1 d0,d1
  beq.s mul+0x68 (0x20001658) ; 0x20001658
  moveq #2,d0
  cmp.1 d0,d1
  beq.s mul+0x70 (0x20001660) ; 0x20001660
 moveq #3,d0
  cmp.1 d0,d1
  beq.s mul+0x78 (0x20001668) ; 0x20001668
 bra.s mul+0x80 (0x20001670) ; 0x20001670
       x = 1;
  moveq #1,d0
  move.w d0, -2(a6)
       break;
  bra.s mul+0x9e (0x2000168e) ; 0x2000168e
       x = 2;
  moveq #2,d0
  move.w d0, -2(a6)
       break;
  bra.s mul+0x9e (0x2000168e) ; 0x2000168e
       x = 3;
  moveq #3,d0
  move.w d0, -2(a6)
       break;
  bra.s mul+0x9e (0x2000168e) ; 0x2000168e
    default: x = 99;
  moveq #99,d0
  move.w d0, -2(a6)
       x = x + 1;
```

```
move.w -2(a6),d0
ext.l d0
addq.l #1,d0
move.w d0,-2(a6)
    }while(x < 100);
move.w -2(a6),d1
ext.l d1
moveq #100,d0
cmp.l d0,d1
blt.s mul+0x86 (0x20001676) ; 0x20001676
}
unlk a6
rts</pre>
```