20:06

```
IRx -> MAR, AC-> T2, 0 -> AC; //1
 M[MAR] -> MBR, INC(MAR) -> MAR; //2
 MBR -> T1; //3
C: if OR(T1)==1 then
   M[MAR] -> MBR, T2 -> B; //4
   MBR -> A; //5
   if A0==0 then
    A-B -> A; //6
    if AND(A31==1, NOT OR(A)==0) then
      A+B -> B; //7
      AC -> A, 2 -> MBR; //8
      A+B -> AC, MBR -> M[MAR], INCR(MAR) -> MAR, DEC(T1) -> T1, goto C; //9
    else
      INCR(MAR) -> MAR, DEC(T1) -> T1, goto C; //10
    fi
   else
    A-B -> A;
    if AND(A31==0, NOT OR(A)==0) then
      A+B -> B;
      AC -> B, -2 -> MBR; //11
      A+B -> AC, MBR -> M[MAR], INCR(MAR) -> MAR, DEC(T1) -> T1, goto C;
    else
      INCR(MAR) -> MAR, DEC(T1) -> T1, goto C;
    fi
   fi
 else
   phi //0
```