```
&()
              *t0 <- &_str_3
1:
              0 <- t0
       param
2:
       call
              WriteStr
3:
       call
              WriteLn
4:
       call
              WriteLn
5:
       &()
               *t1 <- &n
       param 0 <- t1
6:
7:
       call
              ReadNumbers
8:
       &()
               *t2 <- &_str_4
9:
              0 <- t2
       param
       call
              WriteStr
10:
11:
       &()
               *t3 <- &n
12:
       param 0 <- t3
       call t4 <- gcd_iter
13:
       param 0 <- t4
14:
15:
       call
              WriteInt
16:
       call
              WriteLn
       &()
              *t5 <- &_str_5
17:
18:
       param
              0 <- t5
19:
       call
              WriteStr
20:
       &()
               *t6 <- &n
       param 0 <- t6
21:
             t7 <- gcd_mod
22:
       call
23:
       param
              0 <- t7
       call
             WriteInt
24:
25:
       call
              WriteLn
26:
       &()
               *t8 <- &_str_6
       param 0 <- t8
27:
28:
       call
              WriteStr
29:
               *t9 <- &n
       &()
30:
       param
              0 <- t9
31:
       call
             t10 <- gcd_rec
32:
       param
              0 <- t10
33:
       call
             WriteInt
34:
       call
             WriteLn
```

```
gcd_iter
0: 1_while_cond:
1:
       mul
              t11 <- 0, 4
2:
       param 0 <- a
             t12 <- D0FS
3:
4:
              t13 <- t11, t12
              t14 <- a, t13
5:
        add
6:
        mul
              t15 <- 1, 4
7:
        param 0 <- a
8:
        call
              t16 <- DOFS
              t17 <- t15, t16
9:
        add
10:
        add
              t18 <- a, t17
11:
       if
              @t14 # @t18 goto 2_while_body
12:
       aoto 0
13: 2_while_body:
       mul
              t19 <- 0, 4
14:
15:
       param 0 <- a
       call t20 <- DOFS
16:
              t21 <- t19, t20
17:
18:
       add
              t22 <- a, t21
19:
              t23 <- 1, 4
       mul
20:
       param 0 <- a
21:
        call
              t24 <- D0FS
22:
       add
              t25 <- t23, t24
23:
       add
              t26 <- a, t25
24:
       if
              @t22 > @t26 goto 5_if_true
25:
              6_if_false
       goto
26: 5_if_true:
27:
       mul t27 <- 0, 4
28:
       param 0 <- a
              t28 <- D0FS
29:
       call
30:
       add
              t29 <- t27, t28
31:
        add
              t30 <- a, t29
32:
       mul
              t31 <- 1, 4
33:
        param 0 <- a
        call
34:
              t32 <- D0FS
35:
        add
              t33 <- t31, t32
36:
       add
              t34 <- a, t33
37:
              t35 <- @t30, @t34
        sub
38:
        mul
              t36 <- 0, 4
39:
        param 0 <- a
40:
        call t37 <- DOFS
41:
              t38 <- t36, t37
42:
        add
             t39 <- a, t38
43:
       assign @t39 <- t35 // *t39 = &a
44:
       goto 4
45:
   6_if_false:
46:
       mul t40 <- 1, 4
47:
        param 0 < -a
48:
        call
              t41 <- DOFS
49:
        add
              t42 <- t40, t41
50:
       add
              t43 <- a, t42
51:
              t44 <- 0, 4
       mu1
52:
        param 0 <- a
53:
        call t45 <- DOFS
54:
              t46 <- t44, t45
        add
55:
       add
              t47 <- a, t46
56:
              t48 <- @t43, @t47
       sub
57:
       mul
              t49 <- 1, 4
58:
        param 0 <- a
59:
        call t50 <- DOFS
60:
        add
              t51 <- t49, t50
61:
              t52 <- a, t51
        assign @t52 <- t48 // *t52 = &a
62:
63: 4:
64:
       goto 1_while_cond
65: 0:
       mul t53 <- 0, 4
66:
67:
        param 0 <- a
68:
              t54 <- D0FS
        call
69:
              t55 <- t53, t54
        add
70:
              t56 <- a, t55
        add
       return @t56
```

```
gcd_mod
 0: 1_while_cond:
1:
        mul t11 <- 1, 4
 2:
        param 0 <- a
              t12 <- DOFS
 3:
        call
               t13 <- t11, t12
 4:
        bba
 5:
        add
               t14 <- a, t13
               @t14 # 0 goto 2_while_body
 6:
        if
7:
        goto
 8: 2
      _while_body:
              t15 <- 1, 4
 9:
        mul
        param 0 <- a
10:
        call t16 <- DOFS
11:
               t17 <- t15, t16
12:
        add
              t18 <- a, t17
13:
        assign t <- @t18
14:
15:
        mul t19 <- 0, 4
16:
        param 0 < -a
              t20 <- D0FS
17:
        call
18:
        add
               t21 <- t19, t20
19:
        add
               t22 <- a, t21
20:
        mul
               t23 <- 0, 4
        param 0 <- a
21:
22:
               t24 <- D0FS
        call
               t25 <- t23, t24
23:
        add
24:
        add
               t26 <- a, t25
25:
               t27 <- @t26, t
        div
26:
        mul
               t28 <- t27, t
               t29 <- @t22, t28
27:
        sub
28:
        mul
               t30 <- 1, 4
29:
        param 0 <- a
              t31 <- DOFS
30:
        call
31:
        bba
               t32 <- t30, t31
32:
               t33 <- a, t32
        assign @t33 <- t29 // *t33 = &a
33:
34:
        mul
              t34 <- 0, 4
35:
        param 0 < -a
36:
        call
              t35 <- D0FS
37:
              t36 <- t34, t35
        add
              t37 <- a, t36
38:
39:
        assign @t37 <- t // *t37 = &a
40:
        goto 1_while_cond
41: 0:
42:
        mul
              t38 <- 0, 4
43:
        param
              0 <- a
44:
              t39 <- D0FS
        call
45:
        add
              t40 <- t38, t39
46:
        add
              t41 <- a, t40
47:
        return @t41
```

```
t11 <- 1, 4
1:
        param
              0 <- a
              t12 <- D0FS
 2:
        call
 3:
               t13 <- t11, t12
 4:
        add
               t14 <- a, t13
 5:
        if
               @t14 = 0 goto 1_if_true
 6:
              2_if_false
        goto
 7: 1
      _if_true:
              t15 <- 0, 4
 8:
        mul
9:
        param 0 <- a
        call t16 <- DOFS
10:
        add
11:
              t17 <- t15, t16
12:
        add
               t18 <- a, t17
13:
        return @t18
14:
        goto 0
15: 2 if false:
16:
        mul t19 <- 0, 4
17:
        param 0 <- a
        call t20 <- DOFS
18:
               t21 <- t19, t20
19:
        add
20:
        add
               t22 <- a, t21
21:
        assign t <- @t22
22:
        mul
              t23 <- 1, 4
23:
        param 0 <- a
24:
        call t24 <- DOFS
25:
        add
               t25 <- t23, t24
26:
        add
               t26 <- a, t25
27:
        mul
               t27 <- 0, 4
28:
              0 <- a
        param
29:
              t28 <- D0FS
        call
30:
        add
               t29 <- t27, t28
31:
        add
               t30 <- a, t29
32:
        assign @t30 <- @t26 // *t30 = &a
33:
        mul
              t31 <- 1, 4
34:
        param 0 <- a
35:
        call
              t32 <- D0FS
36:
        add
               t33 <- t31, t32
37:
        add
               t34 <- a, t33
38:
        div
               t35 <- t, @t34
39:
        mul
               t36 <- 1, 4
40:
        param
              0 <- a
              t37 <- D0FS
41:
        call
42:
        add
               t38 <- t36, t37
43:
               t39 <- a, t38
44:
               t40 <- t35, @t39
        mul
45:
        sub
               t41 <- t, t40
46:
        mul
               t42 <- 1, 4
47:
        param
              0 <- a
48:
              t43 <- DOFS
        call
49:
        add
               t44 <- t42, t43
50:
               t45 <- a, t44
51:
        assign @t45 <- t41 // *t45 = &a
52:
        param 0 <- a
53:
        call t46 <- gcd_rec
54:
        return t46
55: 0:
```

gcd_rec

```
ReadNumbers
        &()
              *t11 <- &_str_1
 0:
        param 0 <- t11
1:
 2:
        call
              WriteStr
 3:
        call
              t12 <- ReadInt
 4:
        mul
              t13 <- 0, 4
 5:
        param 0 <- n
 6:
        call t14 <- DOFS
 7:
        add
              t15 <- t13, t14
              t16 <- n, t15
 8:
        assign @t16 <- t12 // *t16 = &n
9:
              *t17 <- &_str_2
10:
        &()
        param 0 <- t17
11:
12:
        call WriteStr
        call t18 <- ReadInt
13:
14:
        mul
              t19 <- 1, 4
15:
        param 0 <- n
        call t20 <- DOFS
16:
17:
        bha
              t21 <- t19, t20
18:
              t22 <- n, t21
19:
        assign @t22 <- t18 // *t22 = &n
```