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

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

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

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

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