```
test10
0:
       call t0 <- Input
       assign a <- t0
                                   0: 1_while_cond:
 2:
       call t1 <- Input
                                                a # b goto 2_while_body
 3:
       assign b <- t1
                                         goto
       param 1 <- b
                                   3: 2_while_body:
4:
       param 0 <- a
                                         if
                                                a > b goto 4_if_true
6:
       call t2 <- gcd_iter
                                                5_if_false
                                         goto
       param 0 <- t2
                                   6: 4_if_true:
8:
       call
             Output
                                         sub t0 <- a, b
9:
       param 1 <- b
                                         assign a <- t0
10:
       param 0 <- a
                                         goto 3
       call t3 <- gcd_mod
                                     5_if_false:
       param 0 <- t3
12:
                                  11:
                                         sub t1 <- b, a
13:
       call Output
                                         assign b <- t1
14:
       param 1 <- b
                                  13: 3:
15:
       param 0 <- a
                                  14:
                                         goto 1_while_cond
16:
       call t4 <- gcd_rec
                                  15: 0:
             0 <- t4
       param
                                  16:
                                         return a
18:
       call
             Output
```

```
gcd_mod
 0: 1_while_cond:
       if
              b # 0 goto 2_while_body
       goto
   2_while_body:
       assign t <- b
 5:
       div
            t0 <- a, t
 6:
              t1 <- t0, t
       sub t2 <- a, t1
 8:
       assign b <- t2
 9:
       assign a <- t
10:
       goto 1_while_cond
11: 0:
12:
       return a
```

gcd_iter

```
gcd_rec
       if
             b = 0 goto 1_if_true
       goto
             2_if_false
 2: 1_if_true:
       return a
       goto 0
   2_if_false:
       div
              t0 <- a, b
       mul
              t1 <- t0, b
              t2 <- a, t1
       param 1 <- t2
10:
       param
             0 <- b
11:
       call t3 <- gcd_rec
12:
       return t3
13: 0:
```