```
                                                        CalcPrimes
  0:      &()     t6 <- _str_1
  1:      param   0 <- t6
  2:      call    WriteStr
  3:      param   0 <- n
  4:      call    WriteInt
  5:      &()     t7 <- _str_2
  6:      param   0 <- t7
  7:      call    WriteStr
  8:      param   1 <- 1
  9:      param   0 <- p
 10:      call    t8 <- DIM
 11:      assign  N <- t8
 12:      if      N < 1 goto 5_if_true
 13:      goto    6_if_false
 14: 5_if_true:
 15:      return 0
 16:      goto    4
 17: 6_if_false:
 18: 4:
 19:      mul     t9 <- 0, 4
 20:      param   0 <- p
 21:      call    t10 <- DOFS
 22:      add     t11 <- t9, t10
 23:      add     t12 <- p, t11
 24:      assign @t12 <- 1
 25:      mul     t13 <- 1, 4
 26:      param   0 <- p
 27:      call    t14 <- DOFS
 28:      add     t15 <- t13, t14
 29:      add     t16 <- p, t15
 30:      assign @t16 <- 2
 31:      assign pidx <- 2
 32:      assign psqrt <- 1
 33:      assign v <- 3
 34: 15_while_cond:
 35:      if      v <= n goto 16_while_body
 36:      goto    14
 37: 16_while_body:
 38:      assign isprime <- 1
 39:      assign i <- 1
 40: 21_while_cond:
 41:      if      isprime = 1 goto 23
 42:      goto    20
 43: 23:
 44:      if      i <= psqrt goto 22_while_body
 45:      goto    20
 46: 22_while_body:
 47:      mul     t17 <- i, 4
 48:      param   0 <- p
 49:      call    t18 <- DOFS
 50:      add     t19 <- t17, t18
 51:      add     t20 <- p, t19
 52:      div     t21 <- v, @t20
 53:      mul     t22 <- i, 4
 54:      param   0 <- p
 55:      call    t23 <- DOFS
 56:      add     t24 <- t22, t23
 57:      add     t25 <- p, t24
 58:      mul     t26 <- t21, @t25
 59:      if      t26 = v goto 26_if_true
 60:      goto    27_if_false
 61: 26_if_true:
 62:      assign isprime <- 0
 63:      goto    25
 64: 27_if_false:
 65: 25:
 66:      add     t27 <- i, 1
 67:      assign i <- t27
 68:      goto    21_while_cond
 69: 20:
 70:      if      isprime = 1 goto 32_if_true
 71:      goto    33_if_false
 72: 32_if_true:
 73:      mul     t28 <- pidx, 4
 74:      param   0 <- p
 75:      call    t29 <- DOFS
 76:      add     t30 <- t28, t29
 77:      add     t31 <- p, t30
 78:      assign @t31 <- v
 79:      add     t32 <- pidx, 1
 80:      assign pidx <- t32
 81:      if      pidx = N goto 38_if_true
 82:      goto    39_if_false
 83: 38_if_true:
 84:      &()     t33 <- _str_3
 85:      param   0 <- t33
 86:      call    WriteStr
 87:      assign n <- 0
 88:      goto    37
 89: 39_if_false:
 90: 37:
 91:      goto    31
 92: 33_if_false:
 93: 31:
 94:      add     t34 <- v, 2
 95:      assign v <- t34
 96:      mul     t35 <- psqrt, 4
 97:      param   0 <- p
 98:      call    t36 <- DOFS
 99:      add     t37 <- t35, t36
100:      add     t38 <- p, t37
101:      mul     t39 <- psqrt, 4
102:      param   0 <- p
103:      call    t40 <- DOFS
104:      add     t41 <- t39, t40
105:      add     t42 <- p, t41
106:      mul     t43 <- @t38, @t42
107:      if      v > t43 goto 45_if_true
108:      goto    46_if_false
109: 45_if_true:
110:      add     t44 <- psqrt, 1
111:      assign psqrt <- t44
112:      if      psqrt >= pidx goto 50_if_true
113:      goto    51_if_false
114: 50_if_true:
115:      &()     t45 <- _str_4
116:      param   0 <- t45
117:      call    WriteStr
118:      assign n <- 0
119:      goto    49
120: 51_if_false:
121: 49:
122:      goto    44
123: 46_if_false:
124: 44:
125:      goto    15_while_cond
126: 14:
127:      &()     t46 <- _str_5
128:      param   0 <- t46
129:      call    WriteStr
130:      param   0 <- pidx
131:      call    WriteInt
132:      &()     t47 <- _str_6
133:      param   0 <- t47
134:      call    WriteStr
135:      call    WriteLn
136:      return pidx
```

```
                          PrintPrimes
  0:      &()     t6 <- _str_7
  1:      param   0 <- t6
  2:      call    WriteStr
  3:      param   0 <- n
  4:      call    WriteInt
  5:      call    WriteLn
  6:      assign i <- 0
  7: 5_while_cond:
  8:      if      i < pn goto 6_while_body
  9:      goto    4
 10: 6_while_body:
 11:      &()     t7 <- _str_8
 12:      param   0 <- t7
 13:      call    WriteStr
 14:      mul     t8 <- i, 4
 15:      param   0 <- p
 16:      call    t9 <- DOFS
 17:      add     t10 <- t8, t9
 18:      add     t11 <- p, t10
 19:      param   0 <- @t11
 20:      call    WriteInt
 21:      add     t12 <- i, 1
 22:      assign i <- t12
 23:      div     t13 <- i, 8
 24:      mul     t14 <- t13, 8
 25:      if      t14 = i goto 12_if_true
 26:      goto    13_if_false
 27: 12_if_true:
 28:      call    WriteLn
 29:      goto    11
 30: 13_if_false:
 31: 11:
 32:      goto    5_while_cond
 33: 4:
 34:      call    WriteLn
```

```
                          primes
  0:      &()     t0 <- _str_9
  1:      param   0 <- t0
  2:      call    WriteStr
  3:      call    WriteLn
  4:      &()     t1 <- _str_10
  5:      param   0 <- t1
  6:      call    WriteStr
  7:      call    t2 <- ReadInt
  8:      assign n <- t2
  9:      param   1 <- n
 10:      &()     t3 <- p
 11:      param   0 <- t3
 12:      call    t4 <- CalcPrimes
 13:      assign pn <- t4
 14:      param   2 <- pn
 15:      param   1 <- n
 16:      &()     t5 <- p
 17:      param   0 <- t5
 18:      call    PrintPrimes
```