

```

1000
1010          org    #a000
1020
1030
1040 * Methode 1 (Holzhackerstil) ****
1050 ***** SUB RND 1
1060 ***** 464, 664, 6128
1070 ***** 16bit random numbers
1080 ***** 9 bytes
1090 *****
1100
1110 ; -> HL = RND(65535)
1120
1130 rnd:      call #bd0d
1140          ld     a,r
1150          rlca
1160          xor    h
1170          ld     h,a
1180          ret
1190
1200 * Methode 2 (superlang) *****
1210 ***** SUB RND 2
1220 ***** 464, 664, 6128
1230 ***** 8 bit pseudo rnd numbers
1240 ***** 59 bytes
1250 *****
1260
1270 ; A = Upper limit of 8bit number
1280 ;
1290 ; -> A = Random number
1300
1310 getrnd:   push  af
1320          ld     a,r
1330          ld     l,a
1340          ld     h,a
1350          call  mul8x8
1360          ld     de,(last_r)
1370          add    hl,de
1380          ld     a,h
1390          or     a
1400          jr     nz,get1

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1410          inc    h
1420 get1:      ld     a,l
1430          or     a
1440          jr     nz,get2
1450          inc    l
1460 get2:      ld     (last_r),hl
1470          pop    af
1480          ld     l,a
1490
1500 ; H = Divident
1510 ; L = Divisor
1520 ;
1530 ; -> HL = Result, A = Modulo
1540
1550 div8`8:    xor    a
1560          ld     b,8
1570 dloop:     rl     h
1580          rla
1590          sub    l
1600          jr     nc,dadd
1610          add    a,l
1620 dadd:      ccf
1630          djnz   dloop
1640          rl     h
1650          ret
1660
1670 ; H,L = Multiplicants
1680 ;
1690 ; -> HL: Result
1700
1710 mul8x8:    ld     e,l
1720          ld     d,0
1730          ld     l,d
1740          ld     b,8
1750 mloop:     add    hl,hl
1760          jr     nc,noadd
1770          add    hl,de
1780 noadd:     djnz   mloop
1790          ret
1800
1810 * Methode 3 (Schmankerl by HR) **
1820 ***** SUB RND 3
1830 ***** 464, 664, 6128
1840 ***** Computable random numbers
1850 ***** 29 bytes
1860 *****
1870
1880 ; -> L = 8bit random number (0-255)
1890
1900 rnd2:      ld     de,(last_r)
1910          ld     bc,#6807
1920          ld     hl,0
1930          ld     a,17
1940 rloop:     dec    a
1950          ret     z
1960          add    hl,hl
1970          rl     e
1980          rl     d
1990          jr     nc,rloop
2000          add    hl,bc
2010          jr     nc,rloop
2020          inc    de
2030          jr     rloop
2040
2050 last_r:    defw   %1001011110101001

```