Figure 15.4:

```
++++++++++ 22. r SEQ Generation Menu #3 ++++++++
      r2 SEQ data len: 16384
2200. Allocate r2 SEQ
2202. Initialize r2 SEQ to [F F F ...] (F = FREE)
2210. Generate PVA c SUBSEQ in r2 SEQ
2212. Generate PVA s SUBSEQ in r2 SEQ
2214. Generate PVAA s SUBSEQ in r2 SEQ
2216. Generate repeating block in r2 SEQ

2280. r2 SEQ show len = 1024
2282. Show r2 SEQ

2290. Compare r and r2
------------------------------------
Command? 2214

first value ; P V [A A]? 0 1 12 6 3

...

Command? 2214

first value ; P V [A A]? 1 4 15 3 6

...

Command? 2214

first value ; P V [A A]? 1 9 15 6 3

...

Command? 2282

r2: F 0 F F 1 F F F F 1 F F F 1 F F F F F 0 F F F F 0 F F F F F F 0 F F F F F 1 F F F F F F F 1 F F F F F F 1 F F F F F F F F 0 F F F F F F 0 F F F F F F F F 0 F F F F F F F F 1 F F F F F F F F F 1 F F F F F F F F 1 F F F F F F F F F F 0 F F F F F
    F F F F 0 F F F F F F F F F F F 0 F F F F F F F F F F 1 F F F F F F F F F F F 1 F F F F F F F F F F F 1 F F F F F F F F F F F 0 F F F F F F F F F F F 0 F F F F F F F F F F F 0 F F F F F F F F F F F 1 F F F F F F F F F F F
    F F F F 1 F F F F F F F F F F F F 1 F F F F F F F F F F F F 0 F F F F F F F F F F F F 0 F F F F F F F F F F F F 0 F F F F F F F F F F F F 1 F F F F F F F F F F F F 1 F F F F F F F F F F F F 1 F F F F F F F F F F F F
    F F F F 1 F F F F F F F F F F F F F F F F F 0 F F F F F F F F F F F F F F F F F 0 F F F F F F F F F F F F F F F F F 0 F F F F F F F F F F F F F F F F F 1 F F F F F F F F F F F F F F F F F 1 F F F F F F F F F F F F F F F
    F F F F F 1 F F F F F F F F F F F F F F F F F F F 0 F F F F F F F F F F F F F F F F F F F 0 F F F F F F F F F F F F F F F F F F F 0 F F F F F F F F F F F F F F F F F F F 1 F F F F F F F F F F F F F F F F F F F 1
    F F F F F F F F F F F F F F F F F F F 1 F F F F F F F F F F F F F F F F F F F 0 F F F F F F F F F F F F F F F F F F F 0 F F F F F F F F F F F F F F F F F F F 0 F F F F F F F F F F F F F F F F F F F 0 F F F F F F F F F F F F F F F
    F F F F 1 F F F F F F F F F F F F F F F F F F F F 1 F F F F F F F F F F F F F F F F F F F F 1 F F F F F F F F F F F F F F F F F F F F 1 F F F F F F F F F F F F F F F F F F F F 0 F F F F F F F F F F F F F F F F F F F F 0 F F F F F F
    F F F F F F F F F F F F F F F F F F F F 0 F F F F F F F F F F F F F F F F F F F F 1 F F F F F F F F F F F F F F F F F F F F 1 F F F F F F F F F F F F F F F F F F F F 1 F F F F F F F F F F F F F F F F F F F F 1 F F F F F F F F F F F F

++++++++++ 22. r SEQ Generation Menu #3 ++++++++
      r2 SEQ data len: 16384
2200. Allocate r2 SEQ
2202. Initialize r2 SEQ to [F F F ...] (F = FREE)
2210. Generate PVA c SUBSEQ in r2 SEQ
2212. Generate PVA s SUBSEQ in r2 SEQ
2214. Generate PVAA s SUBSEQ in r2 SEQ
2216. Generate repeating block in r2 SEQ

2280. r2 SEQ show len = 1024
2282. Show r2 SEQ

2290. Compare r and r2
------------------------------------
Command? 2216

Block length [32]? 3

Block data [0] .. [2]? 1 0 0

Require repeating block to be consistent with existing r2 SEQ data (1 = y)? 0

==> NOTE: only populating FREE elements in the r2 SEQ (the 'background') <==

...

Command? 2282

r2: 1 0 0 1 1 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 0 0 0 1 0 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0
    0 1 0 0 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1
    0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0
    1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0
    0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1
    0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0
    1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0
    0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1

...

++++++++++ 21. r SEQ Generation Menu #2 ++++++++
      r SEQ data len: 0
      -- gen r SEQ --
2100. r SEQ data len req = 16384
2110. SEQ 1100
2112. SEQ 1101
2114. SEQ 1102; sqrt(2)
2116. SEQ 1103: CA30
2118. SEQ 800: CDPS [0 4 : 3 1]
2120. SEQ 806: CDPS parity
2122. SEQ 807: CDPS periodic

2150. De-interleave r SEQ

2080. r SEQ show len = 1024
2082. Show r SEQ
------------------------------------
Command? 2120

...

Command? 2082

r:  1 0 0 1 1 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 0 0 0 1 0 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0
    0 1 0 0 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1
    0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0
    1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0
    0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1
    0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0
    1 0 0 1 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0
    0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1


...

++++++++++ 22. r SEQ Generation Menu #3 ++++++++
      r2 SEQ data len: 16384
2200. Allocate r2 SEQ
2202. Initialize r2 SEQ to [F F F ...] (F = FREE)
2210. Generate PVA c SUBSEQ in r2 SEQ
2212. Generate PVA s SUBSEQ in r2 SEQ
2214. Generate PVAA s SUBSEQ in r2 SEQ
2216. Generate repeating block in r2 SEQ

2280. r2 SEQ show len = 1024
2282. Show r2 SEQ

2290. Compare r and r2
------------------------------------
Command? 2290

== r and r2 MATCH ==
```

[1 1]/B event

[1 1]/A event

[0 0 0 0 0]] event