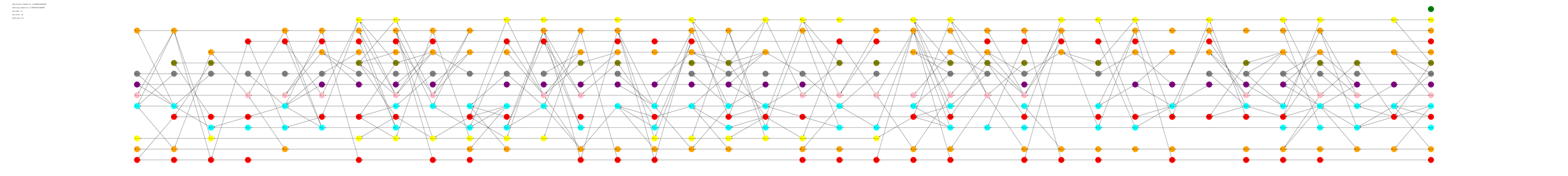

A

1

,

1

,

1

B

1

,

1

,

2

C

1

,

1

,

3

F

1

,

1

,

1

G

1

,

1

,

5

H

1

,

1

,

3 I1, 1, 3 M1, 1, 5

A

2

,

2

,

1

B

2

,

2

,

2

A

2

,

2

,

1

F

2

,

2

,

1 I2, 2, 3 J2, 1, 5 M2, 2, 5
A

3

,

3

,

1

C

3

,

2

,

3

F

3

,

3

,

1

A

3

,

3

,

1 I3, 3, 3 J3, 2, 5 B3, 3, 2
A

4

,

4

,

1

F

4

,

4

,

1

A

4

,

4

,

1

G

4

,

2

,

5 I4, 4, 3 A4, 4, 1
B

5

,

3

,

2

F

5

,

5

,

1

F

5

,

3

,

1

G

5

,

3

,

5 I5, 5, 3 A5, 5, 1 M5, 3, 5

F

6

,

6

,

1

A

6

,

5

,

1

G

6

,

4

,

5

H

6

,

2

,

3 I6, 6, 3 B6, 4, 2 A6, 6, 1 M6, 4, 5

A

7

,

5

,

1

C

7

,

3

,

3

A

7

,

6

,

1

H

7

,

3

,

3 I7, 7, 3 J7, 3, 5 B7, 5, 2 A7, 7, 1 M7, 5, 5 N7, 1, 3
C

8

,

4

,

3

F

8

,

7

,

1

A

8

,

7

,

1

F

8

,

4

,

1

G

8

,

5

,

5

H

8

,

4

,

3 I8, 8, 3 J8, 4, 5 B8, 6, 2 A8, 8, 1 M8, 6, 5 N8, 2, 3
A

9

,

6

,

1

C

9

,

5

,

3

F

9

,

5

,

1

G

9

,

6

,

5

H

9

,

5

,

3 I9, 9, 3 B9, 7, 2 A9, 9, 1 M9, 7, 5

A

1

0

,

7

,

1

B

1

0

,

4

,

2

C

1

0

,

6

,

3

F

1

0

,

8

,

1

A

1

0

,

8

,

1

F

1

0

,

6

,

1 I10, 10, 3 B10, 8, 2 M10, 8, 5
B

1

1

,

5

,

2

C

1

1

,

7

,

3

F

1

1

,

9

,

1

A

1

1

,

9

,

1

F

1

1

,

7

,

1

H

1

1

,

6

,

3 I11, 11, 3 B11, 9, 2 A11, 10, 1 N11, 3, 3
C

1

2

,

8

,

3

F

1

2

,

8

,

1

G

1

2

,

7

,

5

H

1

2

,

7

,

3 I12, 12, 3 A12, 11, 1 M12, 9, 5 N12, 4, 3
A

1

3

,

8

,

1

B

1

3

,

6

,

2

F

1

3

,

1

0

,

1

A

1

3

,

1

0

,

1

G

1

3

,

8

,

5

H

1

3

,

8

,

3

J

1

3

,

5

,

5

B

1

3

,

1

0

,

2

M

1

3

,

1

0

,

5

A

1

4

,

9

,

1

B

1

4

,

7

,

2

F

1

4

,

9

,

1

H

1

4

,

9

,

3 I14, 13, 3 J14, 6, 5 B14, 11, 2 A14, 12, 1 M14, 11, 5 N14, 5, 3
A

1

5

,

1

0

,

1

B

1

5

,

8

,

2

C

1

5

,

9

,

3

F

1

5

,

1

1

,

1

A

1

5

,

1

1

,

1

F

1

5

,

1

0

,

1

H

1

5

,

1

0

,

3

B

1

5

,

1

2

,

2

A

1

5

,

1

3

,

1

B

1

6

,

9

,

2

C

1

6

,

1

0

,

3

F

1

6

,

1

1

,

1

H

1

6

,

1

1

,

3 I16, 14, 3 J16, 7, 5 B16, 13, 2 A16, 14, 1 M16, 12, 5 N16, 6, 3
B

1

7

,

1

0

,

2

C

1

7

,

1

1

,

3

F

1

7

,

1

2

,

1

A

1

7

,

1

2

,

1

F

1

7

,

1

2

,

1

H

1

7

,

1

2

,

3 I17, 15, 3 J17, 8, 5 M17, 13, 5
C

1

8

,

1

2

,

3

F

1

8

,

1

3

,

1

A

1

8

,

1

3

,

1

F

1

8

,

1

3

,

1

H

1

8

,

1

3

,

3 I18, 16, 3 B18, 14, 2 N18, 7, 3
A

1

9

,

1

1

,

1

B

1

9

,

1

1

,

2

C

1

9

,

1

3

,

3

A

1

9

,

1

4

,

1

G

1

9

,

9

,

5

H

1

9

,

1

4

,

3 I19, 17, 3 M19, 14, 5 N19, 8, 3
A

2

0

,

1

2

,

1

B

2

0

,

1

2

,

2

F

2

0

,

1

4

,

1

F

2

0

,

1

4

,

1

G

2

0

,

1

0

,

5

J

2

0

,

9

,

5

A

2

0

,

1

5

,

1

N

2

0

,

9

,

3

A

2

1

,

1

3

,

1

C

2

1

,

1

4

,

3

F

2

1

,

1

5

,

1

G

2

1

,

1

1

,

5 I21, 18, 3 J21, 10, 5 A21, 16, 1 M21, 15, 5
A

2

2

,

1

4

,

1

B

2

2

,

1

3

,

2

A

2

2

,

1

5

,

1

F

2

2

,

1

5

,

1

G

2

2

,

1

2

,

5

B

2

2

,

1

5

,

2

M

2

2

,

1

6

,

5

N

2

2

,

1

0

,

3

A

2

3

,

1

5

,

1

B

2

3

,

1

4

,

2

F

2

3

,

1

6

,

1

A

2

3

,

1

6

,

1

F

2

3

,

1

6

,

1

G

2

3

,

1

3

,

5 I23, 19, 3 J23, 11, 5 B23, 16, 2 M23, 17, 5 N23, 11, 3

F

2

4

,

1

7

,

1

G

2

4

,

1

4

,

5 I24, 20, 3 J24, 12, 5 B24, 17, 2 A24, 17, 1 M24, 18, 5
A

2

5

,

1

6

,

1

B

2

5

,

1

5

,

2

F

2

5

,

1

8

,

1

A

2

5

,

1

7

,

1

F

2

5

,

1

7

,

1

G

2

5

,

1

5

,

5

H

2

5

,

1

5

,

3 I25, 21, 3 J25, 13, 5 A25, 18, 1 M25, 19, 5

A

2

6

,

1

7

,

1

B

2

6

,

1

6

,

2

B

2

6

,

1

8

,

2

A

2

6

,

1

9

,

1

M

2

6

,

2

0

,

5

N

2

6

,

1

2

,

3

A

2

7

,

1

8

,

1

B

2

7

,

1

7

,

2

F

2

7

,

1

9

,

1

A

2

7

,

1

8

,

1

F

2

7

,

1

8

,

1 I27, 22, 3 J27, 14, 5 A27, 20, 1 N27, 13, 3

B

2

8

,

1

8

,

2

F

2

8

,

2

0

,

1

A

2

8

,

1

9

,

1

H

2

8

,

1

6

,

3

B

2

8

,

1

9

,

2

A

2

8

,

2

1

,

1

M

2

8

,

2

1

,

5

N

2

8

,

1

4

,

3

A

2

9

,

1

9

,

1

B

2

9

,

1

9

,

2

A

2

9

,

2

0

,

1

F

2

9

,

1

9

,

1

H

2

9

,

1

7

,

3

B

2

9

,

2

0

,

2

M

2

9

,

2

2

,

5

A

3

0

,

2

1

,

1

H

3

0

,

1

8

,

3 I30, 23, 3 B30, 21, 2 A30, 22, 1 M30, 23, 5 N30, 15, 3
A

3

1

,

2

0

,

1

B

3

1

,

2

0

,

2

A

3

1

,

2

2

,

1

F

3

1

,

2

0

,

1

G

3

1

,

1

6

,

5

H

3

1

,

1

9

,

3 I31, 24, 3 J31, 15, 5 M31, 24, 5

A

3

2

,

2

1

,

1

B

3

2

,

2

1

,

2

F

3

2

,

2

1

,

1

A

3

2

,

2

3

,

1

F

3

2

,

2

1

,

1

H

3

2

,

2

0

,

3 I32, 25, 3 B32, 22, 2 M32, 25, 5 N32, 16, 3
A

3

3

,

2

2

,

1

B

3

3

,

2

2

,

2

F

3

3

,

2

2

,

1

F

3

3

,

2

2

,

1

G

3

3

,

1

7

,

5 I33, 26, 3 J33, 16, 5 B33, 23, 2 M33, 26, 5 N33, 17, 3
B

3

4

,

2

3

,

2

F

3

4

,

2

3

,

1

F

3

4

,

2

3

,

1

G

3

4

,

1

8

,

5

H

3

4

,

2

1

,

3 I34, 27, 3 J34, 17, 5

B

3

5

,

2

4

,

2

A

3

5

,

2

4

,

1

F

3

5

,

2

4

,

1

H

3

5

,

2

2

,

3

B

3

5

,

2

4

,

2

N

3

5

,

1

8

,

3

A

3

6

,

2

3

,

1

B

3

6

,

2

5

,

2

F

3

6

,

2

4

,

1

A

3

6

,

2

5

,

1

F

3

6

,

2

5

,

1

G

3

6

,

1

9

,

5

H

3

6

,

2

3

,

3 I36, 28, 3 J36, 18, 5 B36, 25, 2 A36, 23, 1 M36, 27, 5 N36, 19, 3 O36, 1, 3

node_present_probability: 0.6448903156954038
observing_probability: 0.39585251017605894
num_nodes: 15
num_levels: 36
cheat_prob: 0.3