

① Dev-1

\* 25

$$\begin{array}{r} 25 \mid 2 \\ 25 \mid 12 \mid 2 \\ \hline 1 \mid 12 \mid 6 \mid 2 \\ \hline 0 \mid 6 \mid 3 \mid 2 \\ \hline 0 \mid 3 \mid 1 \\ \hline 1 \end{array}$$

11001

\* 78

$$\begin{array}{r} 78 \mid 2 \\ 78 \mid 38 \mid 2 \\ \hline 0 \mid 38 \mid 18 \mid 2 \\ \hline 1 \mid 18 \mid 9 \mid 2 \\ \hline 1 \mid 9 \mid 4 \mid 2 \\ \hline 1 \mid 4 \mid 2 \mid 2 \\ \hline 0 \mid 2 \mid 1 \end{array}$$

1001110

\* 55

$$\begin{array}{r} 55 \mid 2 \\ 55 \mid 27 \mid 2 \\ \hline 1 \mid 27 \mid 13 \mid 2 \\ \hline 1 \mid 13 \mid 6 \mid 2 \\ \hline 1 \mid 6 \mid 3 \mid 2 \\ \hline 0 \mid 3 \mid 1 \\ \hline 1 \end{array}$$

110111

\* 34

$$\begin{array}{r} 34 \mid 2 \\ 34 \mid 17 \mid 2 \\ \hline 0 \mid 17 \mid 8 \mid 2 \\ \hline 1 \mid 8 \mid 4 \mid 2 \\ \hline 0 \mid 4 \mid 2 \mid 2 \\ \hline 0 \mid 2 \mid 1 \end{array}$$

100010

\* 124

$$\begin{array}{r} 124 \mid 2 \\ 124 \mid 62 \mid 2 \\ \hline 0 \mid 62 \mid 31 \mid 2 \\ \hline 0 \mid 31 \mid 15 \mid 2 \\ \hline 1 \mid 15 \mid 7 \mid 2 \\ \hline 1 \mid 7 \mid 3 \mid 2 \\ \hline 1 \mid 3 \mid 1 \end{array}$$

111100

\* 255

$$\begin{array}{r} 255 \mid 2 \\ 255 \mid 127 \mid 2 \\ \hline 1 \mid 127 \mid 63 \mid 2 \\ \hline 1 \mid 63 \mid 31 \mid 2 \\ \hline 1 \mid 31 \mid 15 \mid 2 \\ \hline 1 \mid 15 \mid 7 \mid 2 \\ \hline 1 \mid 7 \mid 3 \mid 2 \\ \hline 1 \mid 3 \mid 1 \end{array}$$

1111111

\* 256

$$\begin{array}{r} 256 \mid 2 \\ 256 \mid 128 \mid 2 \\ \hline 0 \mid 128 \mid 64 \mid 2 \\ \hline 0 \mid 64 \mid 32 \mid 2 \\ \hline 0 \mid 32 \mid 16 \mid 2 \\ \hline 0 \mid 16 \mid 8 \mid 2 \\ \hline 0 \mid 8 \mid 4 \mid 2 \\ \hline 0 \mid 4 \mid 2 \mid 2 \\ \hline 0 \mid 2 \mid 1 \end{array}$$

100000000

\* 1023

$$\begin{array}{r} 1023 \mid 2 \\ 1023 \mid 511 \mid 2 \\ \hline 1 \mid 511 \mid 255 \mid 2 \\ \hline 1 \mid 255 \mid 127 \mid 2 \\ \hline 1 \mid 127 \mid 63 \mid 2 \\ \hline 1 \mid 63 \mid 31 \mid 2 \\ \hline 1 \mid 31 \mid 15 \mid 2 \\ \hline 1 \mid 15 \mid 7 \mid 2 \\ \hline 1 \mid 7 \mid 3 \mid 2 \\ \hline 1 \mid 3 \mid 1 \end{array}$$

111111111

\* 15

$$\begin{array}{r} 15 \mid 2 \\ 15 \mid 7 \mid 2 \\ \hline 1 \mid 7 \mid 3 \mid 2 \\ \hline 1 \mid 3 \mid 1 \end{array}$$

1111

\* 64

$$\begin{array}{r} 64 \mid 2 \\ 64 \mid 32 \mid 2 \\ \hline 0 \mid 32 \mid 16 \mid 2 \\ \hline 0 \mid 16 \mid 8 \mid 2 \\ \hline 0 \mid 8 \mid 4 \mid 2 \\ \hline 0 \mid 4 \mid 2 \mid 2 \\ \hline 0 \mid 2 \mid 1 \end{array}$$

1000000

⑪ Prob-2

1024 512 256 128 64 32 16 8 4 2 1  
10 9 8 7 6 5 4 3 2 1 0

\* 1011

$$8 + 0 + 2 + 1 = 11$$

\* 111011

$$32 + 16 + 8 + 0 + 2 + 1 = 59$$

\* 10001

$$16 + 0 + 0 + 0 + 1 = 17$$

\* 1111

$$8 + 4 + 2 + 1 = 15$$

\* 101101

$$32 + 0 + 8 + 4 + 0 + 1 = 45$$

\* 1111011

$$127 - 4 = 123$$

\* 101

$$7 - 2 = 5$$

\* 111

$$7$$

\* 11011

$$31 - 4 = 27$$

\* 1011

$$15 - 4 = 11$$

NO 9230708008

Selvak

⑪ Prob

