DSA 101 L1

Lecture 1 — Bitwise

Bitwise: 2x Bitwise

Number Systems — Decimal — Binary: $(1011)_2 = (11)_{10}$

$7 \div 2$: $\frac{7}{2} = 3$, $\frac{3}{2} = 1$, $\frac{1}{2} = 0$

$1 \times 2^3 + 1 \times 2^2 + 1 \times 2^1 + 1 \times 2^0$

$\begin{array}{r|l} 2 & 11 \\ 2 & 5 \\ 2 & 2 \\ 2 & 1 \\ & 0 \end{array$ $\begin{array}{r|l} 2 & 11 \\ 2 & 5 \\ 2 & 2 \\ 2 & 1 \\ & 0 \end{array$ $\begin{array}{r|l} 2 & 11 \\ 2 & 5 \\ 2 & 2 \\ 2 & 1 \\ & 0 \end{array