Дискретные структуры.

Содержание

1 Введение

$$x = \lfloor x \rfloor + \{x\}$$
$$x = \lceil x \rceil - 1 + \{x\} \qquad\qquad (x \notin \mathbb{Z})$$
$$\lfloor x \rfloor + \lfloor y \rfloor + \lfloor x + y \rfloor \leqslant \lfloor 2x \rfloor + \lfloor 2y \rfloor \qquad\qquad (\forall x, y \in \mathbb{R})$$
$$\lceil \log_2(2k-1) \rceil = \lceil \log_2 k \rceil + 1 \qquad\qquad (\forall k \in \mathbb{N})$$
$$\{x + y\} \leqslant \{x\} + \{y\} \qquad\qquad (\forall x, y \in \mathbb{R})$$

Gregorian day of week (Zeller's formula):

$$dow' = \left(mday + \left\lceil \frac{13(month' + 1)}{5} \right\rceil + cyr' + \left\lceil \frac{cyr'}{4} \right\rceil + \left\lceil \frac{cent'}{4} \right\rceil - 2\dot{c}ent' \right) \bmod 7$$

dow' − day of week: 0=Saturday, 1=Sunday, 2=Monday, ..., 6=Friday

$mday$ − day of month

$month'$ − adjusted month: 3=March, ..., 12=December, 13=January, 14=February)

$year'$ − adjusted year: next year for January/February, current year otherwise

cyr' − ($year' \bmod 100$)

$cent'$ − $\lceil \frac{year'}{100} \rceil$