

# Rules

## Cols Ordering

$$\text{Score}_i = P \cdot 10^3 + \log(1 + |\text{Obj}_i|)$$

### Components

#### 1. Type Priority ( $P$ ):

Assign priorities to variable types:

- **Binary Variables** ( $VType = \text{Binary}$ ):  $P = 3$
- **Integer Variables** ( $VType = \text{Integer}$ ):  $P = 2$
- **Continuous Variables** ( $VType = \text{Continuous}$ ):  $P = 1$

#### 2. Objective Coefficient ( $|\text{Obj}_i|$ ):

Variables with larger absolute contributions to the objective function should have a higher score.

## Rows Ordering

$$\text{Score}_j = P \cdot 10^3 + \log(1 + |\text{RHS}_j|) \cdot 10 + \sum (\log(1 + |\gamma_j|))$$

### Components

#### 1. Type Priority ( $P$ ):

Assign priorities to variable types:

- $>$ :  $P = 3$
- $=$ :  $P = 2$
- $<$ :  $P = 1$

#### 2. RHS ( $|\text{RHS}_j|$ ):

RHS variables with larger absolute contribution should have a higher score.

#### 3. Row Coefficient ( $|\gamma_j|$ ):

Row variables with larger absolute contributions should have a higher score.