

Draft Analyser

1. Modeling

1.1. Defining Items and Objects

Let us define a champion by an ID: each champion has a unique ID between 1 and 170 (since there are currently 170 champions).

Let us define the Victory-Defeat matrix $M \in M_{170}(\mathbb{N})$.

For $(i, j) \in \llbracket 1; 170 \rrbracket^2$, the coefficient $M_{i,j}$ represents the number of victories of champion i over the champion j .

In consequence we can have the number of win $w_i \in \mathbb{N}$ and the number of loose $l_i \in \mathbb{N}$.

$$w_i = \sum_{k=1}^{170} M_{i,k}$$
$$l_i = \sum_{k=1}^{170} M_{k,i}$$

1.2. Draft

What is a draft ? A draft is the selection of 5 champions against 5 others champions which are all different : we can define that mathematically with an 10 – tuple we can call D with distinct element.

$$D = (x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8, x_9, x_{10})$$
$$\forall (i, j) \in \llbracket 1, 10 \rrbracket \text{ we have : } x_i \neq x_j$$

2. Historical of draft and command in Prolog

3. Result and conclusion