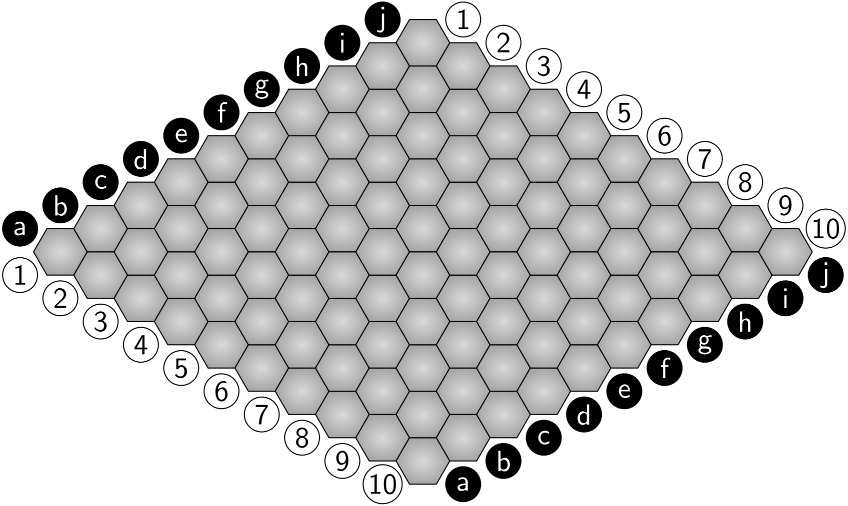
Le Dévelopement d'un programme joueur

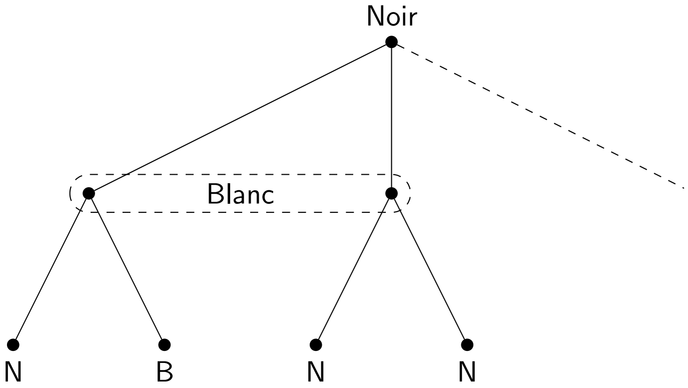
T.I.P.E 2014

Plan

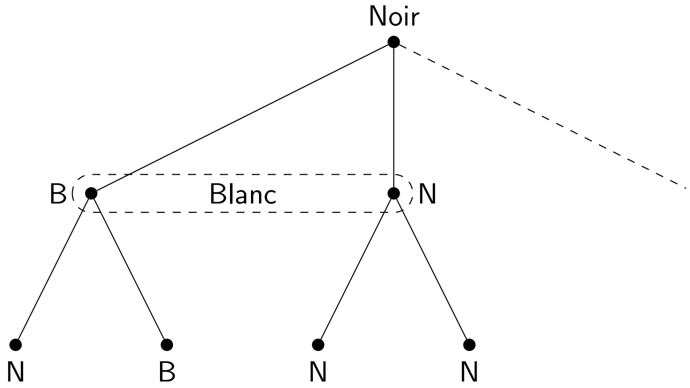
Hex



Présentation de l'algorithme Minimax



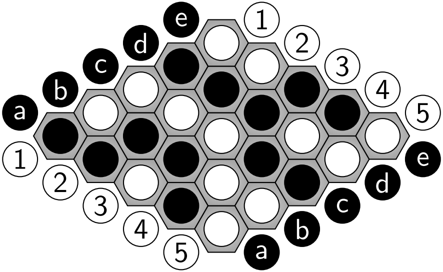
Présentation de l'algorithme Minimax



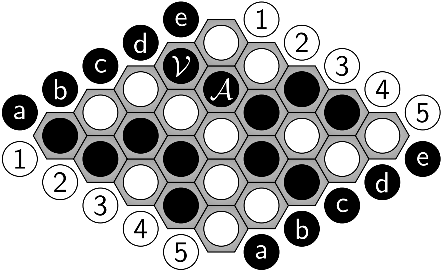
Décomposition du minimax

- getWinningPlay
- winner

winner



Implémentation



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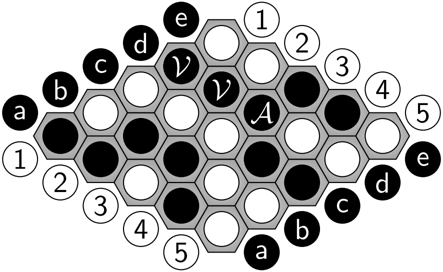

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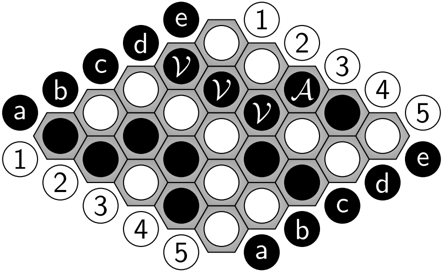

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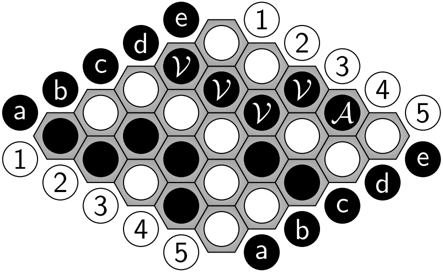

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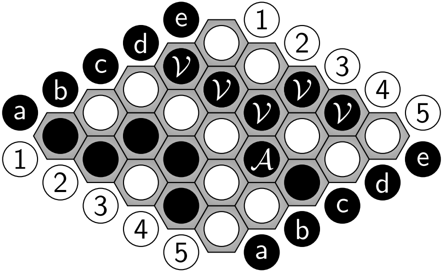
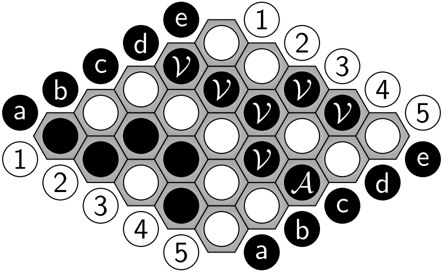
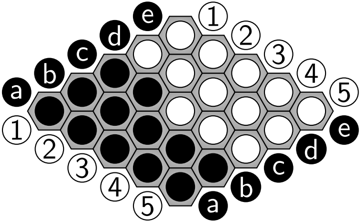


Implémentation



Calcul de la compléxité



- Compléxité d'un parcours

$$P(n) = \sum_{k=1}^{\left\lceil \frac{n^2}{2} \right\rceil} k$$

$$\implies P(n) = O\left(\left\lceil \frac{n^2}{2} \right\rceil^2\right)$$

$$\implies P(n) = O\left(n^4\right)$$

- Compléxité de winner

$$W(n) = nP(n) = O\left(n^5\right)$$