

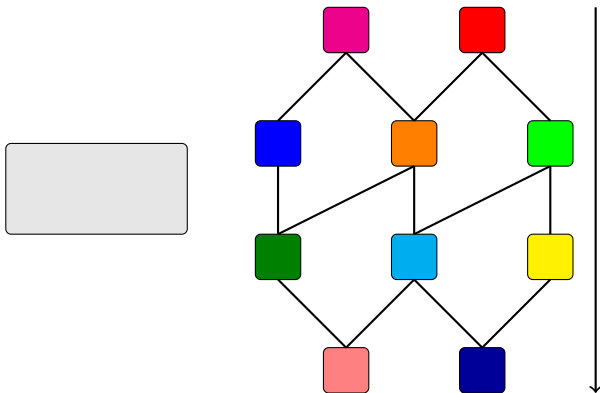
ORDONNANCEMENT PAR BATCH AVEC CONTRAINTE DE COMPATIBILITÉ

Nadia Brauner, Guylain Naves

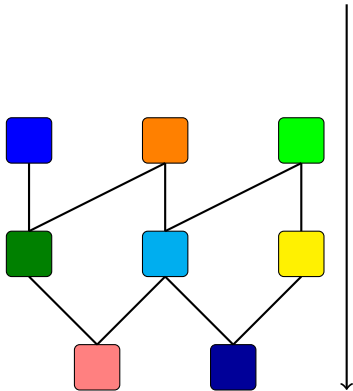
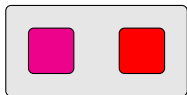
Grenoble

G-SCOP, UJF, INPG

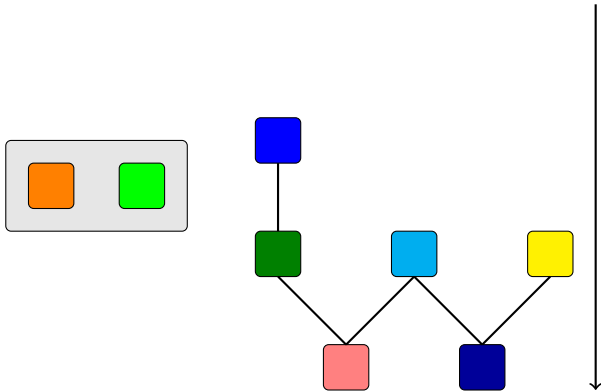
Ordonnement par batch



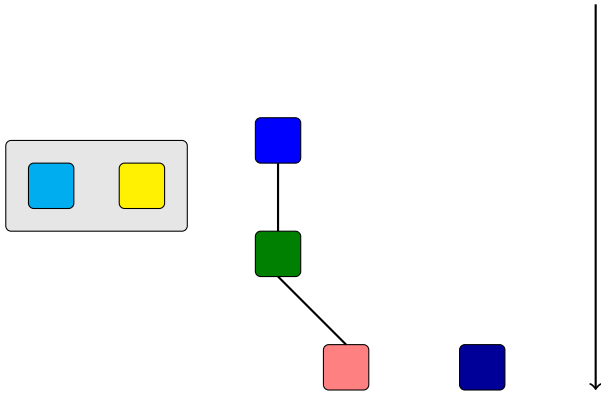
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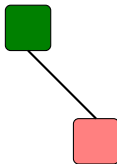
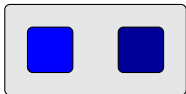
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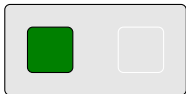
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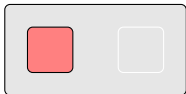
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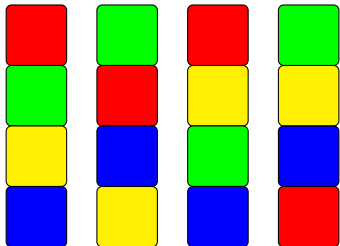
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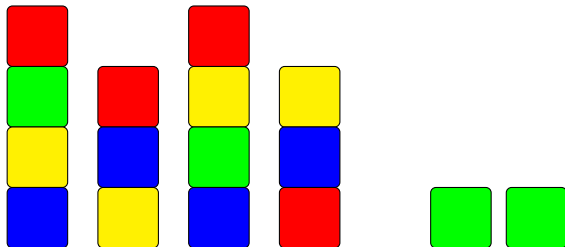
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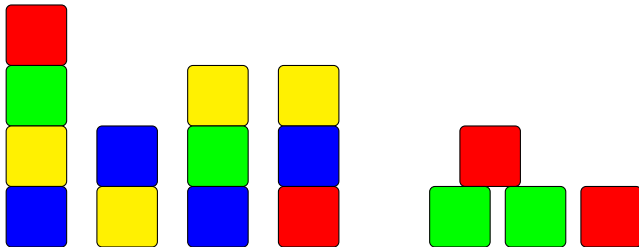
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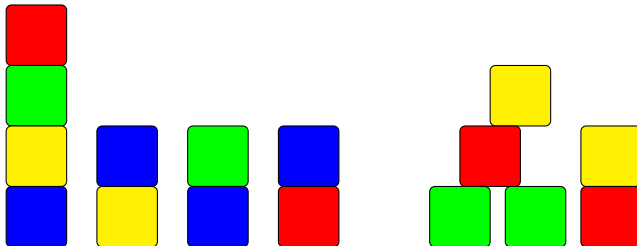
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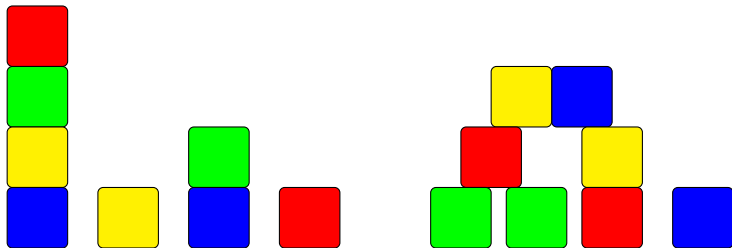
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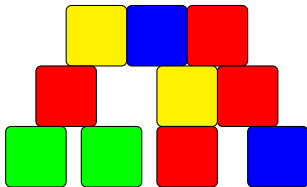
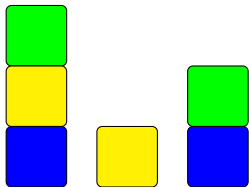
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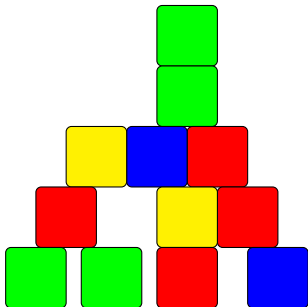
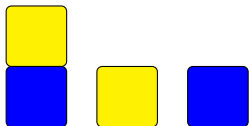
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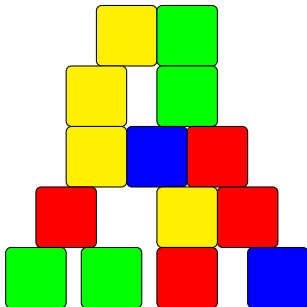
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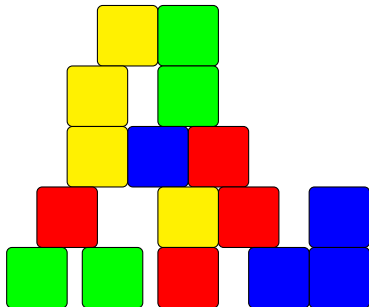
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Contraintes de compatibilité

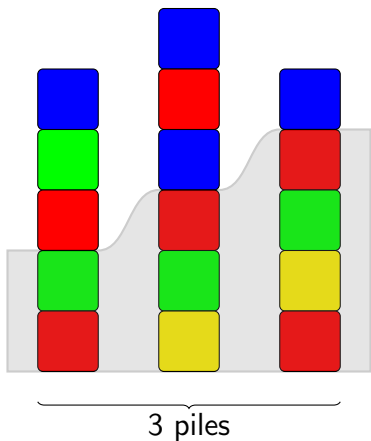


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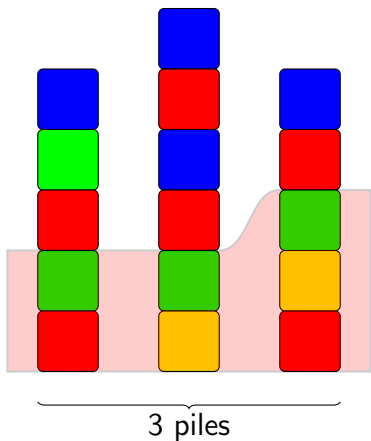


Contexte d'application

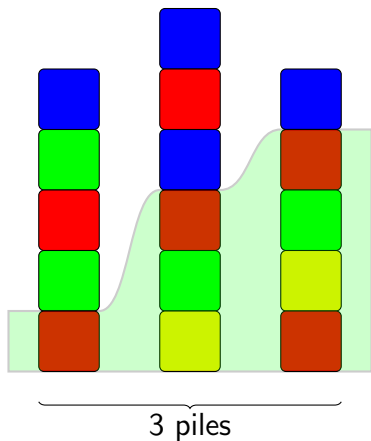
Nombre de tâche fixé



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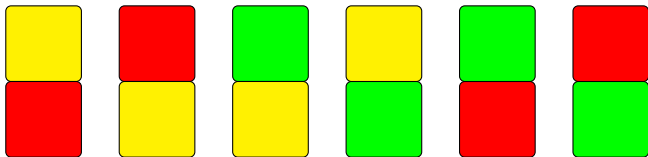
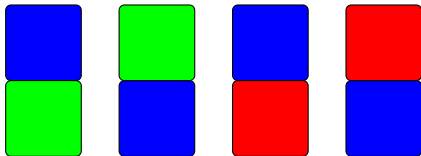
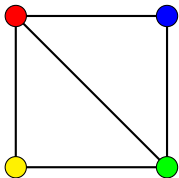


Nombre de tâche fixé

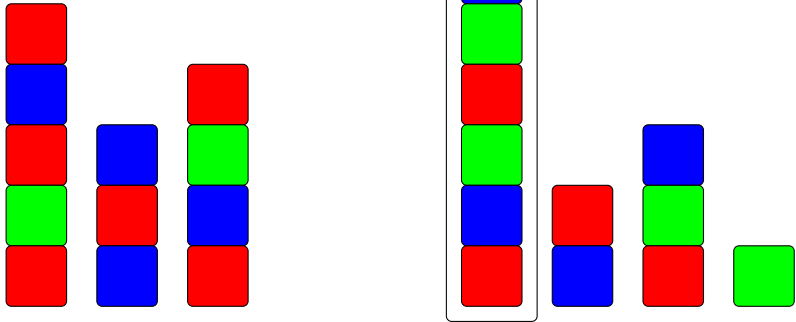


Machine à capacité infinie

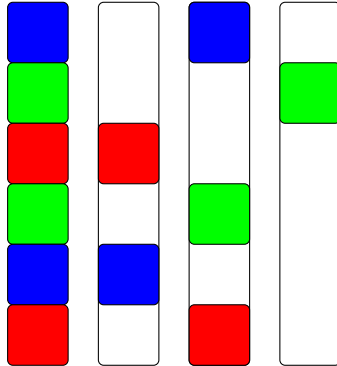
(Timkovsky, 1990)



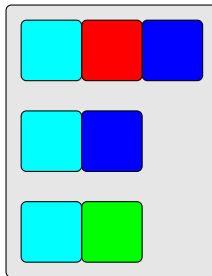
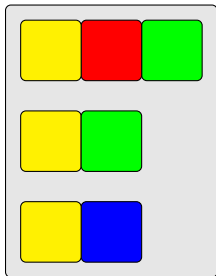
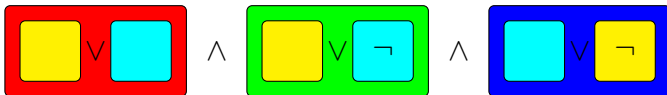
Capacité 2 : superséquence



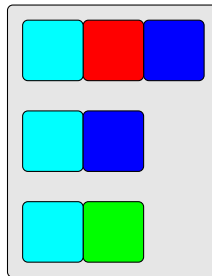
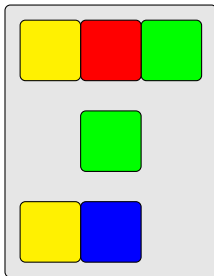
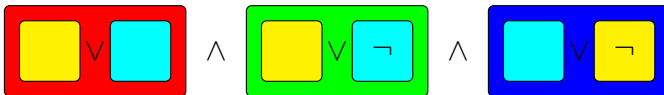
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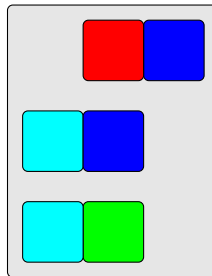
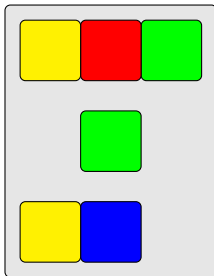
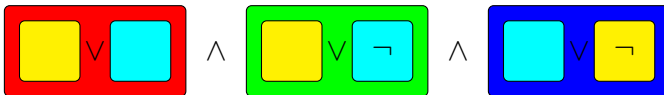
NP-complétude



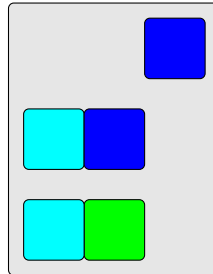
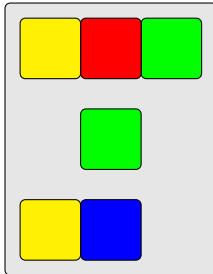
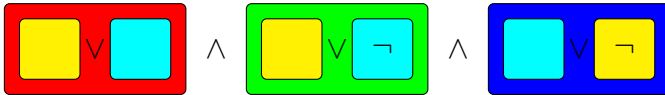
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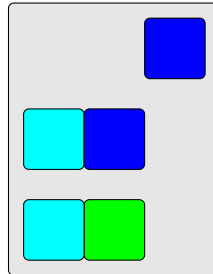
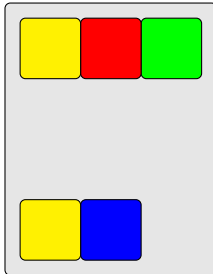
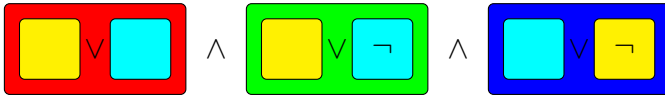
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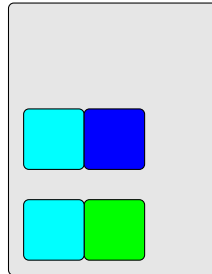
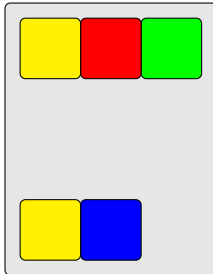
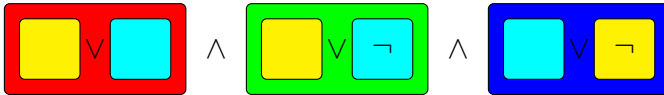
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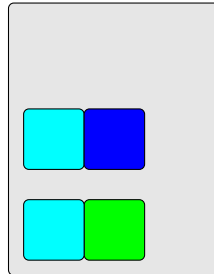
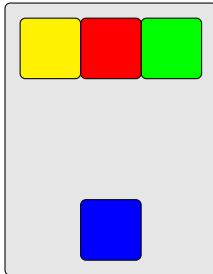
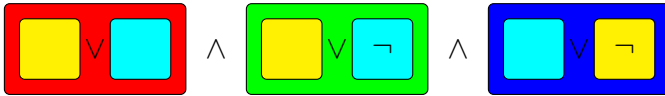
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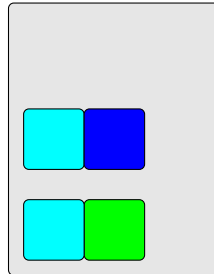
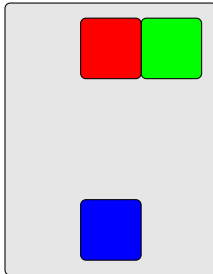
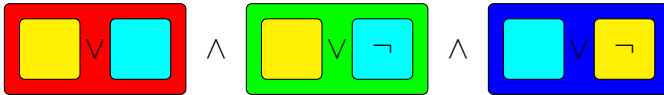
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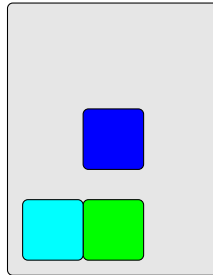
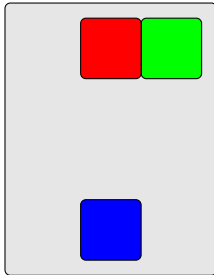
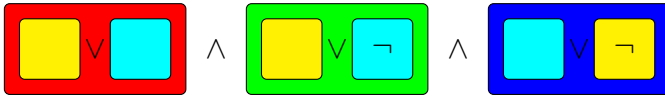
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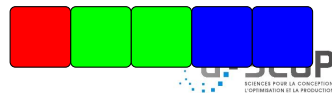
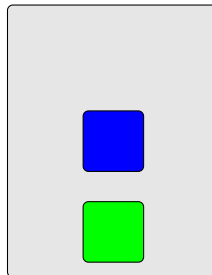
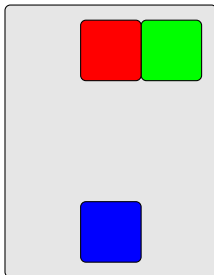
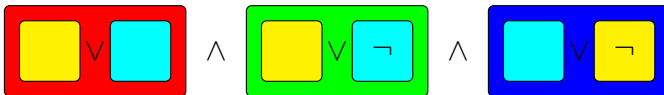
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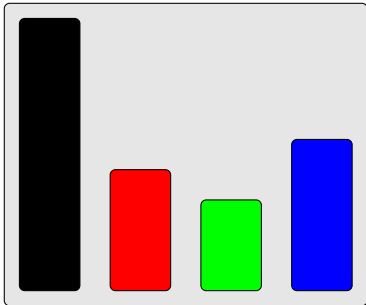
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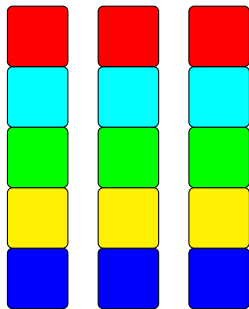
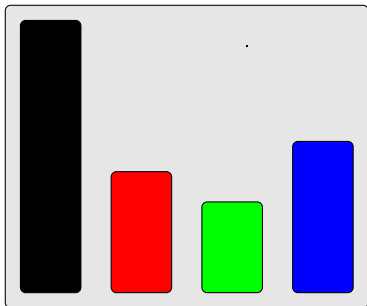
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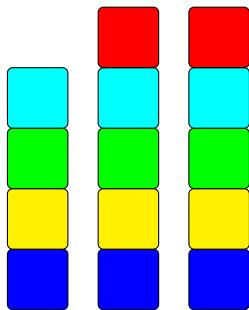
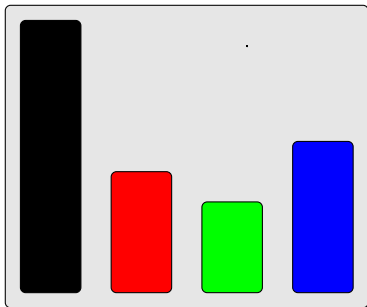
Restriction sur les tâches



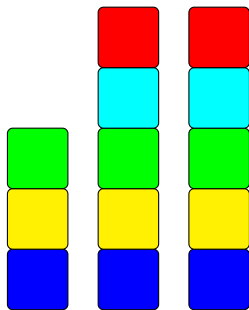
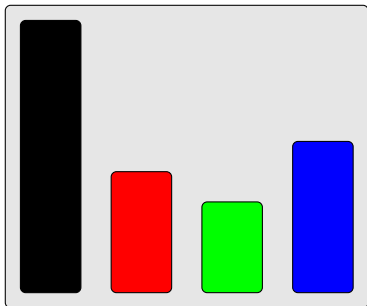
Restriction sur les tâches



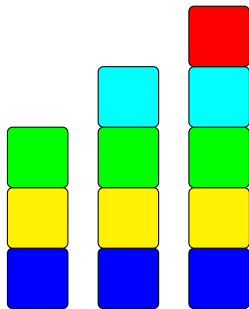
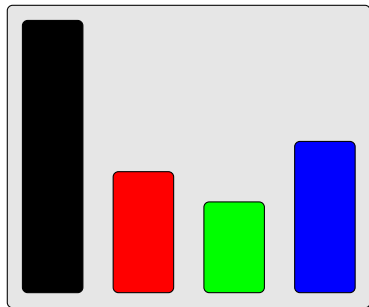
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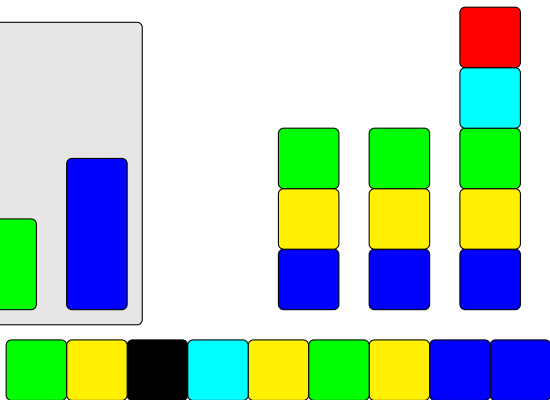
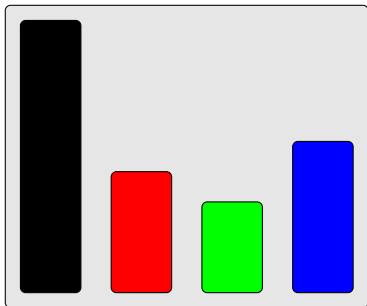
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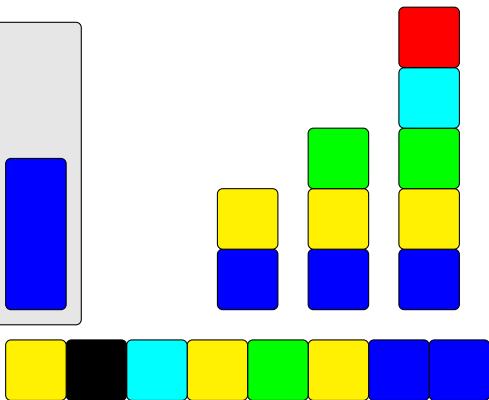
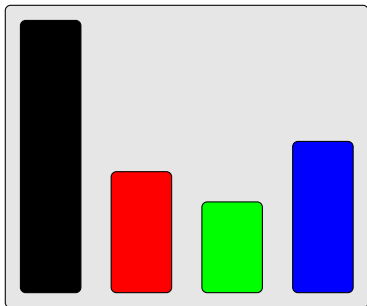
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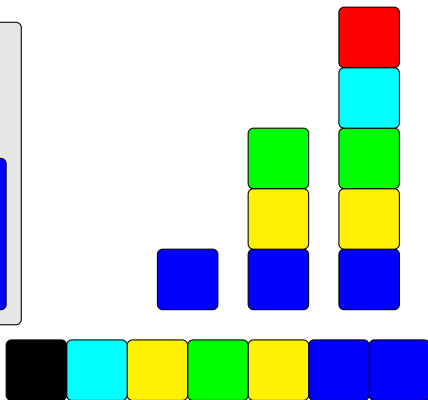
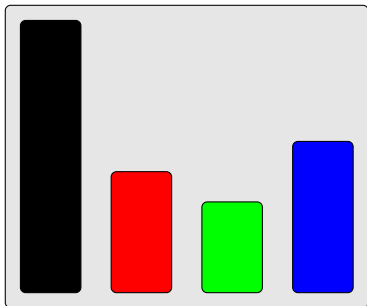
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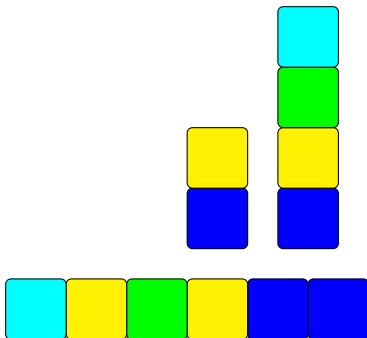
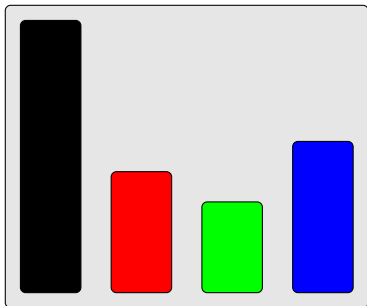
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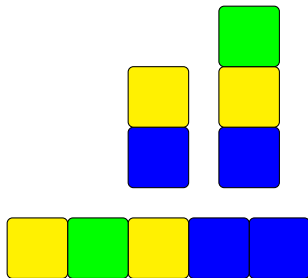
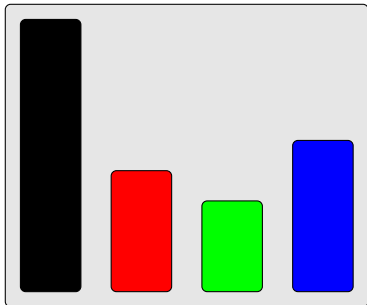
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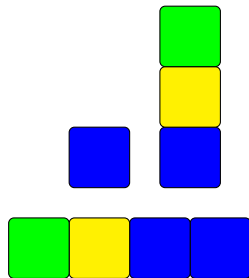
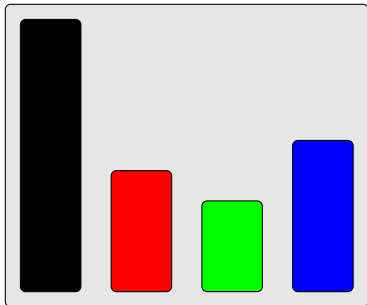
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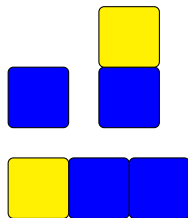
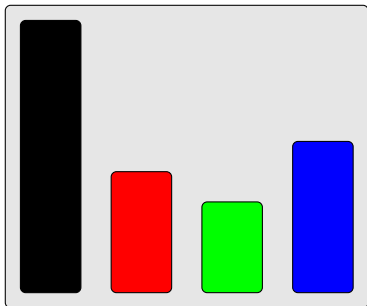
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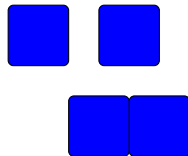
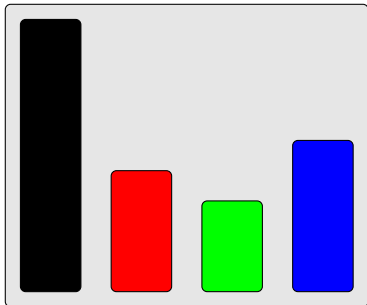
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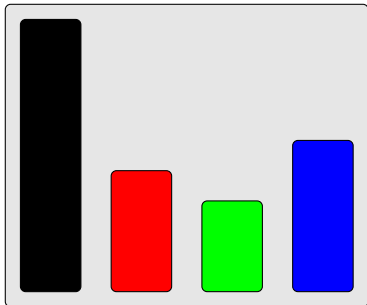
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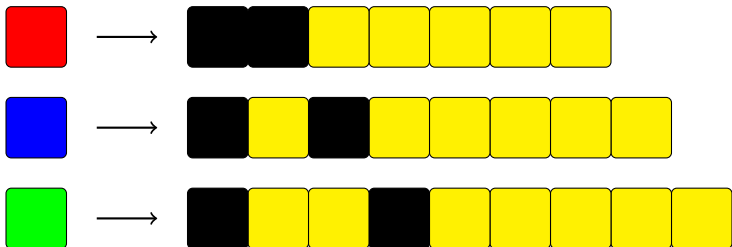
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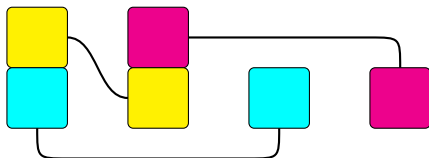
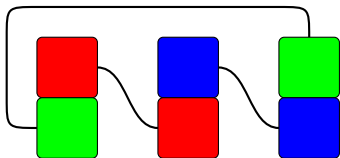
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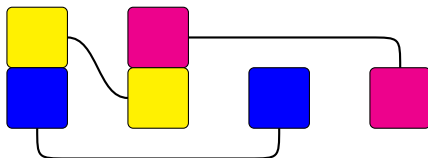
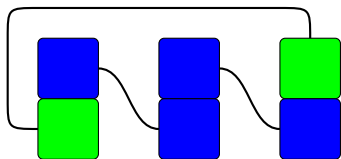
Restriction sur les opérations



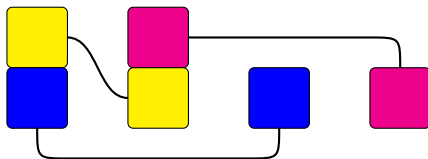
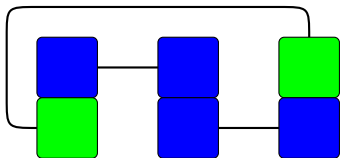
Tâches de longueur 2



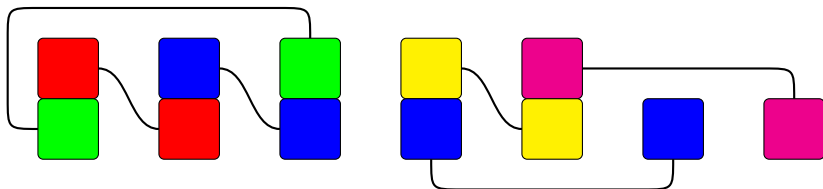
Tâches de longueur 2



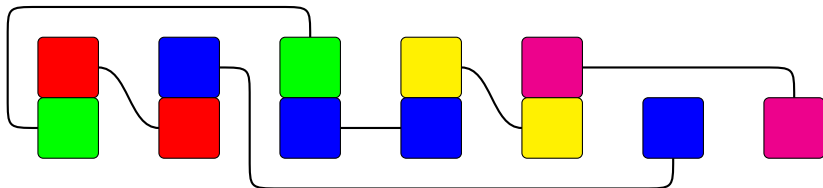
Tâches de longueur 2



Tâches de longueur 2



Tâches de longueur 2



Récapitulatif

- **Polynomial** avec un nombre de tâches fixé
- **NP-complet** avec capacité infinie
- **NP-complet** avec capacité 2
- D-SUPERSEQUENCE est **NP-complet**
- **Polynomial** avec capacité 2 et tâches de longueur 2

Autres résultats

- **NP-complet** si chaque opération au plus une fois dans chaque tâche
- **NP-complet** si chaque opération apparaît 2 fois et tâches de longueur 3 (*Timkovsky*)
- **Polynomial** si chaque opération au plus une fois dans chaque tâche et le nombre d'opération est fixé.