

# MaxiGrille A: 0.050608 → 0.037918 secondes

Nom du fichier ?  
MaxiGrilleA.sud

| +-----Grille Initiale-----+ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                             | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1                           | 15 | .  | 6  | .  | .  | 3  | .  | 16 | .  | 11 | 13 | .  | .  | 1  | .  | .  |
| 2                           | .  | 12 | 4  | .  | 14 | .  | .  | .  | .  | 6  | .  | 5  | 15 | .  | 11 | 3  |
| 3                           | 3  | 2  | 7  | .  | 11 | .  | .  | .  | 4  | 14 | 12 | 15 | .  | 8  | .  | .  |
| 4                           | .  | .  | .  | .  | 6  | 8  | 12 | 15 | .  | .  | .  | 7  | 2  | .  | 13 | .  |
| 5                           | .  | 13 | 14 | 15 | 7  | 5  | .  | 9  | 3  | .  | 10 | 12 | .  | 11 | .  | 1  |
| 6                           | 10 | .  | .  | 16 | 8  | 14 | .  | .  | 5  | .  | .  | .  | 4  | 6  | .  | .  |
| 7                           | .  | .  | .  | 5  | .  | .  | 3  | 6  | .  | 8  | 9  | .  | 12 | 10 | .  | .  |
| 8                           | 2  | .  | .  | 7  | 4  | .  | 10 | 1  | .  | 13 | .  | 6  | .  | 14 | 3  | .  |
| 9                           | .  | .  | 13 | .  | 15 | 4  | .  | .  | .  | .  | .  | 2  | 1  | 7  | 9  | 16 |
| 10                          | 16 | 3  | 15 | .  | .  | .  | 7  | 13 | .  | .  | .  | .  | 14 | 12 | .  | .  |
| 11                          | 4  | .  | 10 | .  | 1  | .  | 8  | .  | .  | .  | 14 | 13 | 11 | 2  | 6  | 15 |
| 12                          | .  | 1  | 11 | 2  | 9  | .  | .  | 14 | 12 | .  | 7  | 4  | .  | .  | .  | .  |
| 13                          | .  | 11 | .  | 3  | .  | 7  | 13 | .  | 6  | 12 | 15 | .  | .  | 5  | .  | .  |
| 14                          | 13 | .  | 5  | .  | 12 | 9  | 6  | 2  | 8  | 16 | 4  | .  | 7  | 3  | 1  | .  |
| 15                          | .  | 10 | .  | 6  | .  | .  | .  | 4  | 7  | .  | 5  | .  | .  | 16 | 14 | 8  |
| 16                          | .  | 16 | .  | .  | 5  | .  | .  | .  | 13 | .  | 1  | .  | .  | .  | 12 | 2  |

| +-----Grille Finale-----+ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                           | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1                         | 15 | 14 | 6  | 10 | 2  | 3  | 4  | 16 | 9  | 11 | 13 | 8  | 5  | 1  | 7  | 12 |
| 2                         | 8  | 12 | 4  | 13 | 14 | 10 | 1  | 7  | 2  | 6  | 16 | 5  | 15 | 9  | 11 | 3  |
| 3                         | 3  | 2  | 7  | 1  | 11 | 13 | 9  | 5  | 4  | 14 | 12 | 15 | 16 | 8  | 10 | 6  |
| 4                         | 9  | 5  | 16 | 11 | 6  | 8  | 12 | 15 | 1  | 10 | 3  | 7  | 2  | 4  | 13 | 14 |
| 5                         | 6  | 13 | 14 | 15 | 7  | 5  | 2  | 9  | 3  | 4  | 10 | 12 | 8  | 11 | 16 | 1  |
| 6                         | 10 | 9  | 3  | 16 | 8  | 14 | 11 | 12 | 5  | 7  | 2  | 1  | 4  | 6  | 15 | 13 |
| 7                         | 11 | 4  | 1  | 5  | 13 | 15 | 3  | 6  | 14 | 8  | 9  | 16 | 12 | 10 | 2  | 7  |
| 8                         | 2  | 8  | 12 | 7  | 4  | 16 | 10 | 1  | 15 | 13 | 11 | 6  | 9  | 14 | 3  | 5  |
| 9                         | 14 | 6  | 13 | 12 | 15 | 4  | 5  | 11 | 10 | 3  | 8  | 2  | 1  | 7  | 9  | 16 |
| 10                        | 16 | 3  | 15 | 8  | 10 | 2  | 7  | 13 | 11 | 1  | 6  | 9  | 14 | 12 | 5  | 4  |
| 11                        | 4  | 7  | 10 | 9  | 1  | 12 | 8  | 3  | 16 | 5  | 14 | 13 | 11 | 2  | 6  | 15 |
| 12                        | 5  | 1  | 11 | 2  | 9  | 6  | 16 | 14 | 12 | 15 | 7  | 4  | 3  | 13 | 8  | 10 |
| 13                        | 1  | 11 | 2  | 3  | 16 | 7  | 13 | 8  | 6  | 12 | 15 | 14 | 10 | 5  | 4  | 9  |
| 14                        | 13 | 15 | 5  | 14 | 12 | 9  | 6  | 2  | 8  | 16 | 4  | 10 | 7  | 3  | 1  | 11 |
| 15                        | 12 | 10 | 9  | 6  | 3  | 1  | 15 | 4  | 7  | 2  | 5  | 11 | 13 | 16 | 14 | 8  |
| 16                        | 7  | 16 | 8  | 4  | 5  | 11 | 14 | 10 | 13 | 9  | 1  | 3  | 6  | 15 | 12 | 2  |

Résolution de la MaxiGrilleA.sud, temps CPU = 0.037918 secondes

# MaxiGrille B: 28.952462 → 13.475373 secondes

MaxiGrilleB.sud

| -----Grille Initiale----- |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                           | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1                         | 12 | 7  | .  | 9  | .  | .  | .  | 10 | .  | .  | .  | .  | .  | 15 | .  | 5  |
| 2                         | .  | 1  | 5  | 2  | .  | 12 | .  | .  | .  | .  | .  | 7  | .  | 13 | 14 | 6  |
| 3                         | 10 | .  | .  | 11 | .  | .  | 15 | .  | .  | 13 | .  | 14 | 3  | 4  | .  | 2  |
| 4                         | 3  | .  | 15 | .  | 16 | .  | .  | .  | 4  | .  | .  | .  | 12 | .  | 9  | .  |
| 5                         | .  | 12 | .  | 8  | .  | 3  | 10 | 6  | .  | .  | 15 | .  | 1  | .  | 16 | .  |
| 6                         | .  | .  | 11 | 3  | .  | 15 | .  | .  | 7  | .  | .  | .  | .  | 5  | .  | 13 |
| 7                         | .  | .  | .  | 15 | 7  | 5  | .  | .  | 3  | 1  | 2  | 4  | .  | 11 | .  | 14 |
| 8                         | .  | 13 | .  | 7  | .  | .  | .  | .  | .  | .  | 6  | .  | 8  | .  | 2  | .  |
| 9                         | .  | .  | .  | 12 | .  | 14 | .  | 1  | 8  | 9  | .  | .  | 2  | 16 | 4  | .  |
| 10                        | .  | .  | .  | .  | .  | .  | 5  | 9  | .  | .  | .  | 2  | 13 | 1  | .  | .  |
| 11                        | .  | .  | 1  | .  | .  | .  | 4  | .  | 16 | .  | 5  | 15 | .  | 8  | .  | 3  |
| 12                        | .  | .  | 7  | 14 | .  | .  | 6  | 8  | 1  | .  | .  | .  | 5  | .  | .  | .  |
| 13                        | .  | 8  | 6  | .  | 5  | 10 | .  | .  | .  | 4  | 16 | .  | .  | 14 | .  | 12 |
| 14                        | .  | 9  | 2  | 10 | 4  | .  | .  | 16 | 12 | .  | 3  | .  | .  | .  | .  | .  |
| 15                        | .  | .  | .  | .  | 6  | 8  | .  | 7  | 14 | .  | .  | .  | .  | .  | .  | .  |
| 16                        | 11 | .  | 12 | .  | 9  | .  | 14 | .  | .  | .  | .  | 13 | .  | .  | .  | .  |

| -----Grille Finale----- |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                         | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1                       | 12 | 7  | 13 | 9  | 14 | 4  | 3  | 10 | 2  | 16 | 8  | 6  | 11 | 15 | 1  | 5  |
| 2                       | 4  | 1  | 5  | 2  | 8  | 12 | 9  | 11 | 15 | 3  | 10 | 7  | 16 | 13 | 14 | 6  |
| 3                       | 10 | 16 | 8  | 11 | 1  | 6  | 15 | 5  | 9  | 13 | 12 | 14 | 3  | 4  | 7  | 2  |
| 4                       | 3  | 14 | 15 | 6  | 16 | 7  | 13 | 2  | 4  | 5  | 11 | 1  | 12 | 10 | 9  | 8  |
| 5                       | 2  | 12 | 9  | 8  | 11 | 3  | 10 | 6  | 13 | 14 | 15 | 5  | 1  | 7  | 16 | 4  |
| 6                       | 1  | 4  | 11 | 3  | 2  | 15 | 16 | 14 | 7  | 8  | 9  | 12 | 6  | 5  | 10 | 13 |
| 7                       | 16 | 6  | 10 | 15 | 7  | 5  | 8  | 13 | 3  | 1  | 2  | 4  | 9  | 11 | 12 | 14 |
| 8                       | 5  | 13 | 14 | 7  | 12 | 9  | 1  | 4  | 10 | 11 | 6  | 16 | 8  | 3  | 2  | 15 |
| 9                       | 6  | 5  | 3  | 12 | 15 | 14 | 7  | 1  | 8  | 9  | 13 | 11 | 2  | 16 | 4  | 10 |
| 10                      | 8  | 10 | 4  | 16 | 3  | 11 | 5  | 9  | 6  | 12 | 14 | 2  | 13 | 1  | 15 | 7  |
| 11                      | 9  | 11 | 1  | 13 | 10 | 2  | 4  | 12 | 16 | 7  | 5  | 15 | 14 | 8  | 6  | 3  |
| 12                      | 15 | 2  | 7  | 14 | 13 | 16 | 6  | 8  | 1  | 10 | 4  | 3  | 5  | 12 | 11 | 9  |
| 13                      | 7  | 8  | 6  | 1  | 5  | 10 | 2  | 3  | 11 | 4  | 16 | 9  | 15 | 14 | 13 | 12 |
| 14                      | 14 | 9  | 2  | 10 | 4  | 13 | 11 | 16 | 12 | 15 | 3  | 8  | 7  | 6  | 5  | 1  |
| 15                      | 13 | 15 | 16 | 5  | 6  | 8  | 12 | 7  | 14 | 2  | 1  | 10 | 4  | 9  | 3  | 11 |
| 16                      | 11 | 3  | 12 | 4  | 9  | 1  | 14 | 15 | 5  | 6  | 7  | 13 | 10 | 2  | 8  | 16 |

Résolution de la MaxiGrilleB.sud, temps CPU = 13.475373 secondes

# MaxiGrille C: 308.869542 → 89.028713 secondes

Nom du fichier ?  
MaxiGrilleC.sud

|    | +-----Grille Initiale-----+ |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |
|----|-----------------------------|----|----|----|----|----|----|---|----|----|----|----|----|----|----|----|
|    | 1                           | 2  | 3  | 4  | 5  | 6  | 7  | 8 | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1  | .                           | 6  | 3  | .  | 5  | 13 | .  | 9 | 16 | .  | 1  | 2  | .  | 12 | 15 | .  |
| 2  | 2                           | 16 | .  | .  | .  | 12 | .  | . | .  | .  | 8  | .  | .  | .  | 11 | 5  |
| 3  | 13                          | .  | 8  | 5  | 11 | 3  | .  | . | .  | .  | 7  | 14 | 9  | 2  | .  | 16 |
| 4  | .                           | .  | 7  | 12 | .  | .  | 2  | . | .  | 5  | .  | .  | 10 | 1  | .  | .  |
| 5  | 3                           | .  | 9  | .  | .  | 7  | 8  | 1 | 13 | 4  | 2  | .  | .  | 5  | .  | 6  |
| 6  | 8                           | 12 | 4  | .  | 9  | .  | .  | . | .  | .  | .  | 6  | .  | 3  | 16 | 10 |
| 7  | .                           | .  | .  | 2  | 3  | .  | 16 | . | .  | 11 | .  | 8  | 15 | .  | .  | .  |
| 8  | 7                           | .  | .  | .  | 6  | .  | .  | . | .  | .  | .  | 16 | .  | .  | .  | 8  |
| 9  | 6                           | .  | .  | .  | 13 | .  | .  | . | .  | .  | .  | 5  | .  | .  | .  | 15 |
| 10 | .                           | .  | .  | 3  | 7  | .  | 5  | . | .  | 14 | .  | 15 | 6  | .  | .  | .  |
| 11 | 12                          | 1  | 13 | .  | 2  | .  | .  | . | .  | .  | .  | 7  | .  | 8  | 10 | 9  |
| 12 | 15                          | .  | 5  | .  | .  | 16 | 11 | 6 | 8  | 12 | 10 | .  | .  | 4  | .  | 14 |
| 13 | .                           | .  | 15 | 6  | .  | .  | 9  | . | .  | 16 | .  | .  | 4  | 14 | .  | .  |
| 14 | 11                          | .  | 14 | 4  | 8  | 6  | .  | . | .  | .  | 5  | 12 | 16 | 10 | .  | 1  |
| 15 | 1                           | 9  | .  | .  | .  | 15 | .  | . | .  | .  | 3  | .  | .  | .  | 5  | 11 |
| 16 | .                           | 3  | 12 | .  | 4  | 11 | .  | 5 | 7  | .  | 6  | 1  | .  | 15 | 8  | .  |

| +-----Grille Finale-----+ |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
|---------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
|                           | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |  |
| 1                         | 14 | 6  | 3  | 11 | 5  | 13 | 7  | 9  | 16 | 10 | 1  | 2  | 8  | 12 | 15 | 4  |  |
| 2                         | 2  | 16 | 1  | 9  | 10 | 12 | 6  | 15 | 4  | 13 | 8  | 3  | 14 | 7  | 11 | 5  |  |
| 3                         | 13 | 10 | 8  | 5  | 11 | 3  | 1  | 4  | 12 | 15 | 7  | 14 | 9  | 2  | 6  | 16 |  |
| 4                         | 4  | 15 | 7  | 12 | 14 | 8  | 2  | 16 | 6  | 5  | 9  | 11 | 10 | 1  | 3  | 13 |  |
| 5                         | 3  | 14 | 9  | 16 | 15 | 7  | 8  | 1  | 13 | 4  | 2  | 10 | 11 | 5  | 12 | 6  |  |
| 6                         | 8  | 12 | 4  | 1  | 9  | 14 | 13 | 11 | 5  | 7  | 15 | 6  | 2  | 3  | 16 | 10 |  |
| 7                         | 10 | 13 | 6  | 2  | 3  | 5  | 16 | 12 | 1  | 11 | 14 | 8  | 15 | 9  | 4  | 7  |  |
| 8                         | 7  | 5  | 11 | 15 | 6  | 2  | 4  | 10 | 9  | 3  | 12 | 16 | 1  | 13 | 14 | 8  |  |
| 9                         | 6  | 11 | 10 | 8  | 13 | 9  | 12 | 14 | 3  | 1  | 4  | 5  | 7  | 16 | 2  | 15 |  |
| 10                        | 9  | 4  | 16 | 3  | 7  | 10 | 5  | 8  | 2  | 14 | 13 | 15 | 6  | 11 | 1  | 12 |  |
| 11                        | 12 | 1  | 13 | 14 | 2  | 4  | 15 | 3  | 11 | 6  | 16 | 7  | 5  | 8  | 10 | 9  |  |
| 12                        | 15 | 2  | 5  | 7  | 1  | 16 | 11 | 6  | 8  | 12 | 10 | 9  | 3  | 4  | 13 | 14 |  |
| 13                        | 5  | 8  | 15 | 6  | 12 | 1  | 9  | 2  | 10 | 16 | 11 | 13 | 4  | 14 | 7  | 3  |  |
| 14                        | 11 | 7  | 14 | 4  | 8  | 6  | 3  | 13 | 15 | 2  | 5  | 12 | 16 | 10 | 9  | 1  |  |
| 15                        | 1  | 9  | 2  | 13 | 16 | 15 | 10 | 7  | 14 | 8  | 3  | 4  | 12 | 6  | 5  | 11 |  |
| 16                        | 16 | 3  | 12 | 10 | 4  | 11 | 14 | 5  | 7  | 9  | 6  | 1  | 13 | 15 | 8  | 2  |  |

Résolution de la MaxiGrilleC.sud, temps CPU = 89.028713 secondes

# MaxiGrille D: 5430.344846 (1h30) → 47.033808 secondes

Nom du fichier ?  
MaxiGrilleD.sud

|    | Grille Initiale |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|    | 1               | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1  | .               | 2  | .  | 3  | 5  | .  | .  | .  | 13 | .  | .  | .  | 12 | .  | .  | 11 |
| 2  | .               | 6  | .  | .  | .  | 2  | 12 | .  | .  | 8  | 15 | 3  | 4  | .  | 14 | .  |
| 3  | .               | .  | 12 | 14 | .  | 4  | 8  | 11 | .  | .  | 16 | .  | .  | .  | .  | .  |
| 4  | .               | .  | .  | 11 | .  | .  | .  | .  | .  | 2  | .  | 10 | .  | .  | 6  | 16 |
| 5  | .               | 14 | 8  | .  | .  | .  | 4  | .  | 12 | .  | 13 | .  | .  | .  | .  | 1  |
| 6  | .               | .  | 5  | .  | 3  | 15 | .  | .  | 9  | .  | .  | 1  | 6  | 14 | .  | 12 |
| 7  | 15              | .  | .  | .  | 12 | 11 | 6  | 1  | .  | 14 | .  | .  | 10 | .  | .  | .  |
| 8  | .               | .  | 1  | 9  | 8  | .  | .  | .  | .  | .  | 4  | .  | 16 | 15 | 11 | .  |
| 9  | .               | .  | 7  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 15 |
| 10 | 2               | .  | 11 | 13 | 6  | 14 | .  | .  | 3  | .  | 7  | .  | .  | .  | 5  | 10 |
| 11 | .               | .  | .  | .  | 4  | 8  | .  | 5  | .  | .  | .  | .  | .  | 6  | 13 | .  |
| 12 | 3               | 10 | 15 | 8  | 1  | .  | .  | .  | 6  | 16 | 9  | .  | 2  | 11 | .  | .  |
| 13 | 14              | .  | 6  | 15 | .  | 12 | .  | 8  | .  | .  | 1  | .  | .  | 10 | 2  | .  |
| 14 | .               | .  | 16 | .  | .  | 1  | .  | .  | 15 | .  | .  | .  | .  | .  | .  | .  |
| 15 | .               | .  | .  | .  | .  | 3  | 13 | 14 | 2  | 5  | .  | 7  | 15 | .  | .  | 8  |
| 16 | 11              | 4  | 2  | .  | 15 | .  | 10 | 6  | 8  | 12 | .  | 13 | .  | 1  | .  | 5  |

|    | Grille Finale |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|---------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|    | 1             | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1  | 16            | 2  | 9  | 3  | 5  | 6  | 1  | 10 | 13 | 7  | 14 | 4  | 12 | 8  | 15 | 11 |
| 2  | 1             | 6  | 13 | 10 | 16 | 2  | 12 | 7  | 11 | 8  | 15 | 3  | 4  | 5  | 14 | 9  |
| 3  | 5             | 15 | 12 | 14 | 13 | 4  | 8  | 11 | 1  | 6  | 16 | 9  | 3  | 7  | 10 | 2  |
| 4  | 8             | 7  | 4  | 11 | 14 | 9  | 3  | 15 | 5  | 2  | 12 | 10 | 1  | 13 | 6  | 16 |
| 5  | 6             | 14 | 8  | 16 | 10 | 7  | 4  | 9  | 12 | 15 | 13 | 11 | 5  | 2  | 3  | 1  |
| 6  | 7             | 11 | 5  | 4  | 3  | 15 | 16 | 13 | 9  | 10 | 2  | 1  | 6  | 14 | 8  | 12 |
| 7  | 15            | 13 | 3  | 2  | 12 | 11 | 6  | 1  | 16 | 14 | 5  | 8  | 10 | 9  | 7  | 4  |
| 8  | 10            | 12 | 1  | 9  | 8  | 5  | 14 | 2  | 7  | 3  | 4  | 6  | 16 | 15 | 11 | 13 |
| 9  | 4             | 5  | 7  | 6  | 2  | 10 | 11 | 3  | 14 | 13 | 8  | 12 | 9  | 16 | 1  | 15 |
| 10 | 2             | 1  | 11 | 13 | 6  | 14 | 9  | 16 | 3  | 4  | 7  | 15 | 8  | 12 | 5  | 10 |
| 11 | 9             | 16 | 14 | 12 | 4  | 8  | 15 | 5  | 10 | 1  | 11 | 2  | 7  | 6  | 13 | 3  |
| 12 | 3             | 10 | 15 | 8  | 1  | 13 | 7  | 12 | 6  | 16 | 9  | 5  | 2  | 11 | 4  | 14 |
| 13 | 14            | 3  | 6  | 15 | 9  | 12 | 5  | 8  | 4  | 11 | 1  | 16 | 13 | 10 | 2  | 7  |
| 14 | 13            | 8  | 16 | 5  | 7  | 1  | 2  | 4  | 15 | 9  | 10 | 14 | 11 | 3  | 12 | 6  |
| 15 | 12            | 9  | 10 | 1  | 11 | 3  | 13 | 14 | 2  | 5  | 6  | 7  | 15 | 4  | 16 | 8  |
| 16 | 11            | 4  | 2  | 7  | 15 | 16 | 10 | 6  | 8  | 12 | 3  | 13 | 14 | 1  | 9  | 5  |

Résolution de la MaxiGrilleD.sud, temps CPU = 47.033808 secondes