

Rendu de Projet : Nombre de chemins

Pseudo sur CodinGame : LucasV-TheKeeper918

Adresse du dépôt GitHub : <https://github.com/LucasVaurie/NumberOfPaths>

Code :

```
class NumberPaths {
    public static int calculChemins(int x, int y, int rows,
                                    int cols, int[][] array)
    {
        int[][] cache = new int[rows+1][cols+1];
        for (int i = 0 ; i <= rows ; i++) {
            for (int j = 0 ; j <= cols ; j++)
                cache[i][j] = -1;
        }
        return calculChemins(x, y, rows, cols, array, cache);
    }

    public static int calculChemins(int x, int y, int rows,
                                    int cols, int[][] array, int[][] cache)
    {
        if ((x == cols || y == rows) || (array[x][y] == 1))
            return 0;
        if (x == cols-1 && y == rows-1)
            return 1;
        if (cache[x][y] == -1)
            cache[x][y] = calculChemins(x, y+1, rows, cols, array, cache)
                + calculChemins(x+1, y, rows, cols, array, cache);
        return cache[x][y];
    }

    public static void main(String args[])
    {
        Scanner in = new Scanner(System.in);
        int M = in.nextInt();
        int N = in.nextInt();
        int[][] tab = new int[M][N];
        if (in.hasNextLine()) {
            in.nextLine();
        }

        for (int i = 0; i < M; i++) {
            String ROW = in.nextLine();
            for (int j = 0 ; j < N ; j++) {
                tab[i][j] = (int)(ROW.charAt(j)-'0');
            }
        }
        System.out.println(calculChemins(0, 0, M, N, tab));
        in.close();
    }
}
```