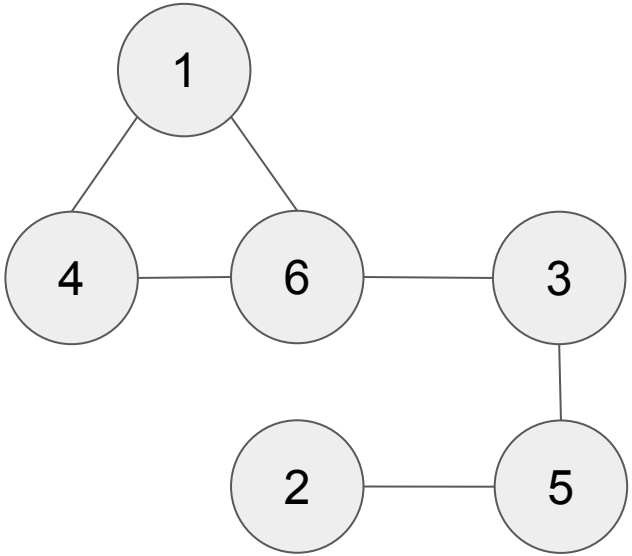
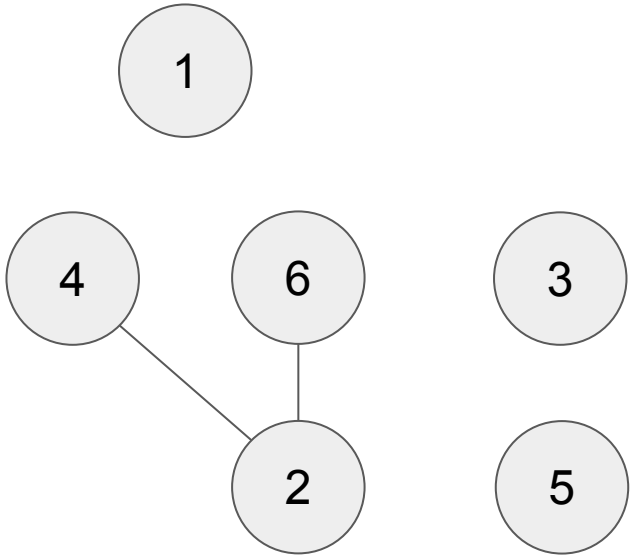
Presentación TP2

Coloreo de máximo impacto

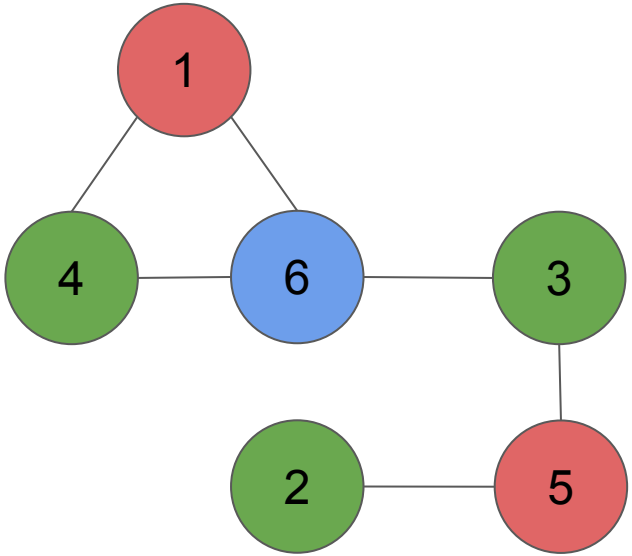


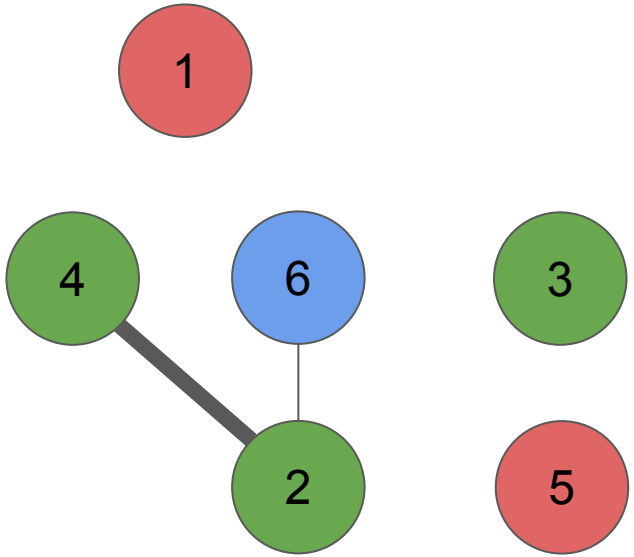
$G = (V, E_G)$



$H = (V, E_H)$

Óptimo!

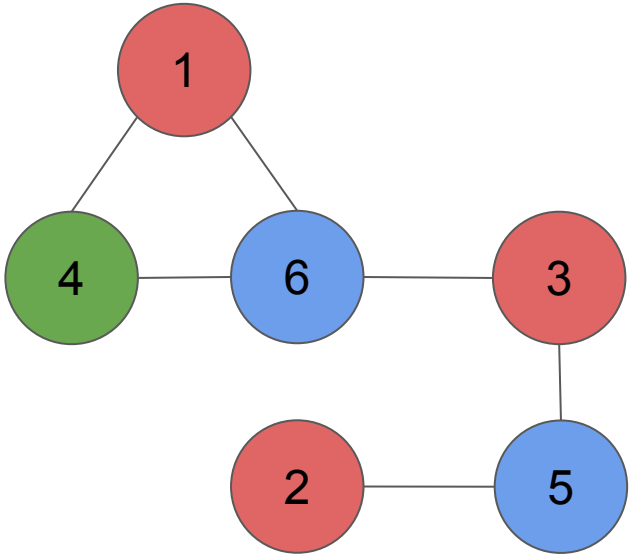




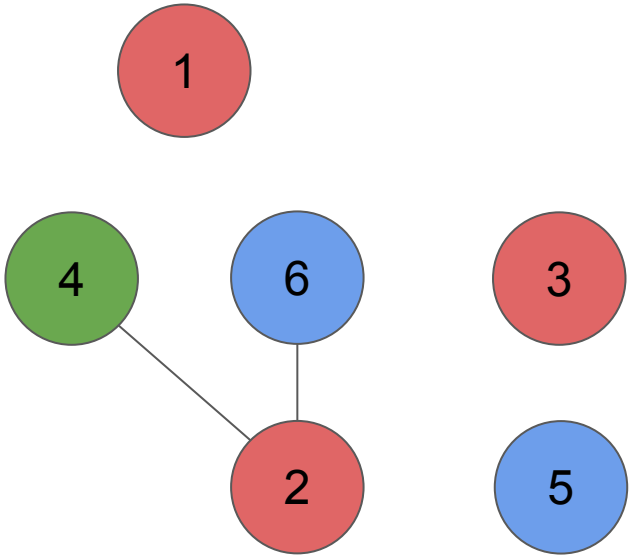
$G = (V, E_G)$

$H = (V, E_H)$

Factible, no óptimo.

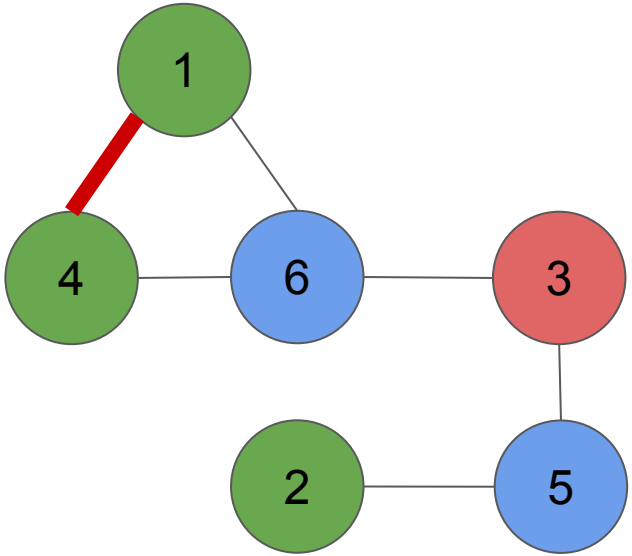


$G = (V, E_G)$

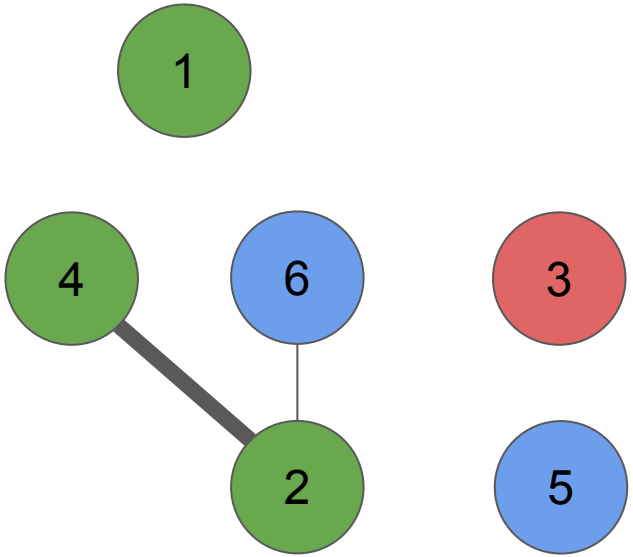


$H = (V, E_H)$

Infactible

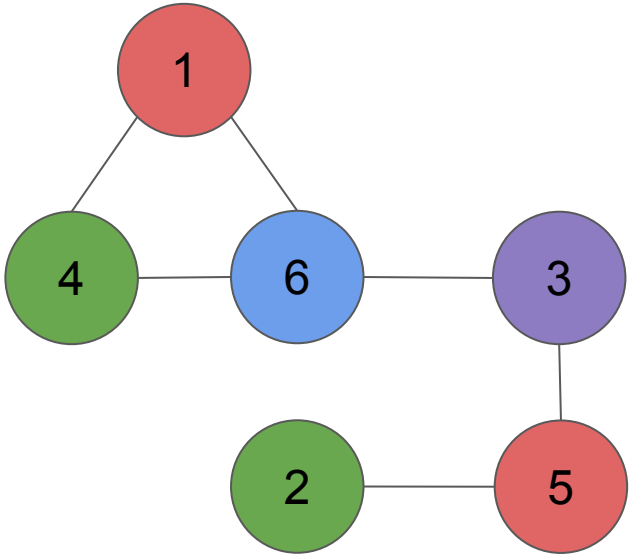


$G = (V, E_G)$

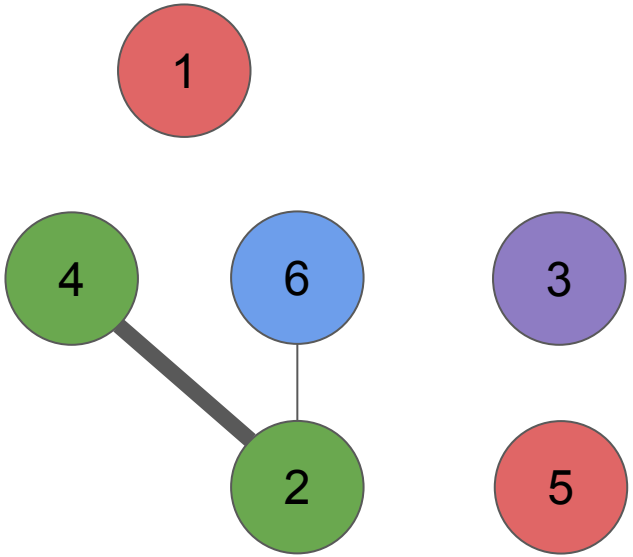


$H = (V, E_H)$

Óptimo alternativo!



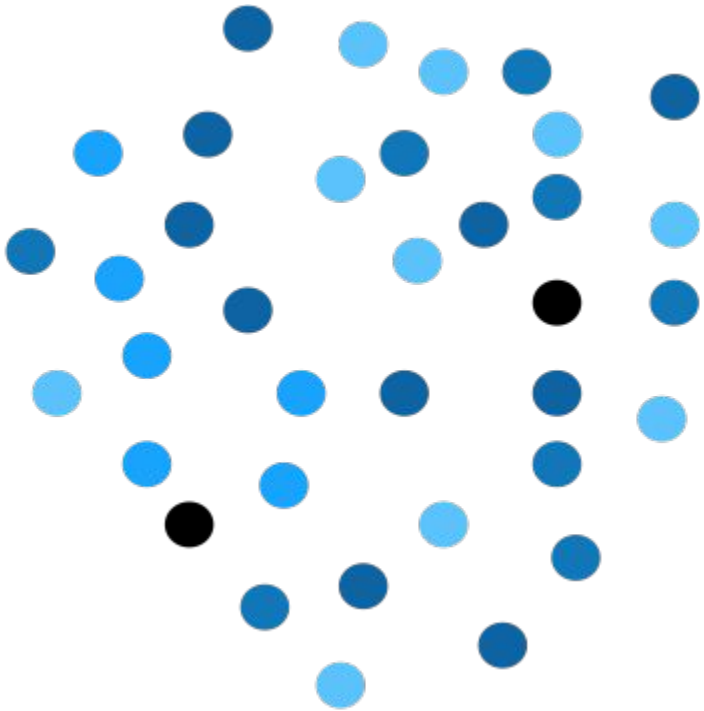
$G = (V, E_G)$



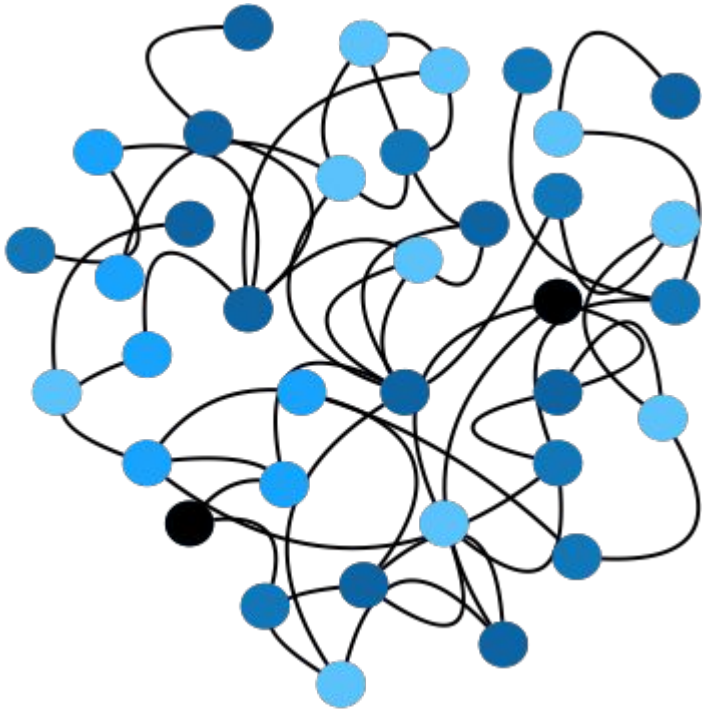
$H = (V, E_H)$

Búsqueda local

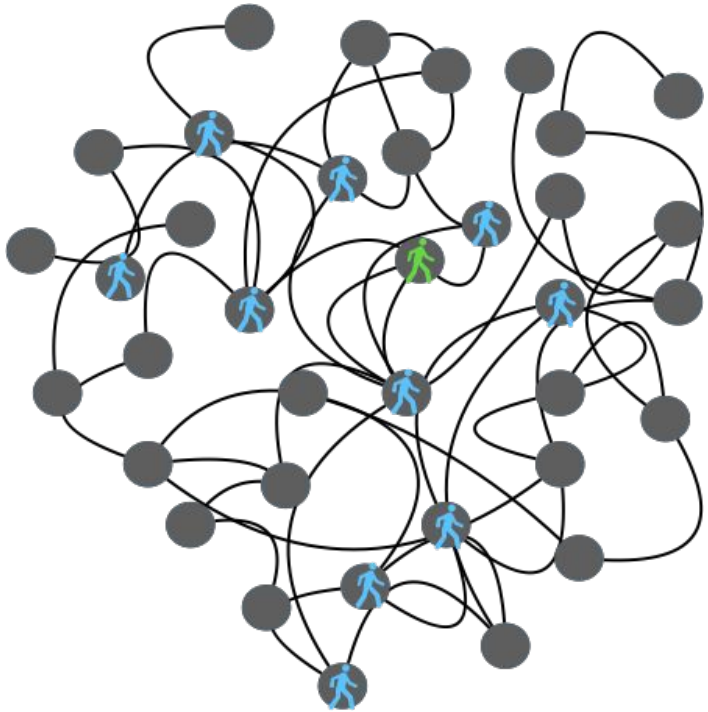
Paso 1: Definir soluciones



Paso 2: Definir vecindarios



Paso 3: Explorar grafo



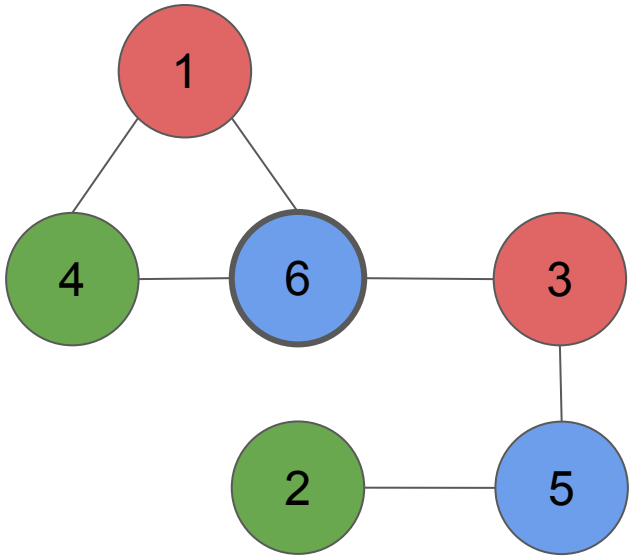
¿Y en nuestro problema?

Qué es una solución?

Un coloreo de los vértices.

Qué es una solución?

Un coloreo de los vértices.



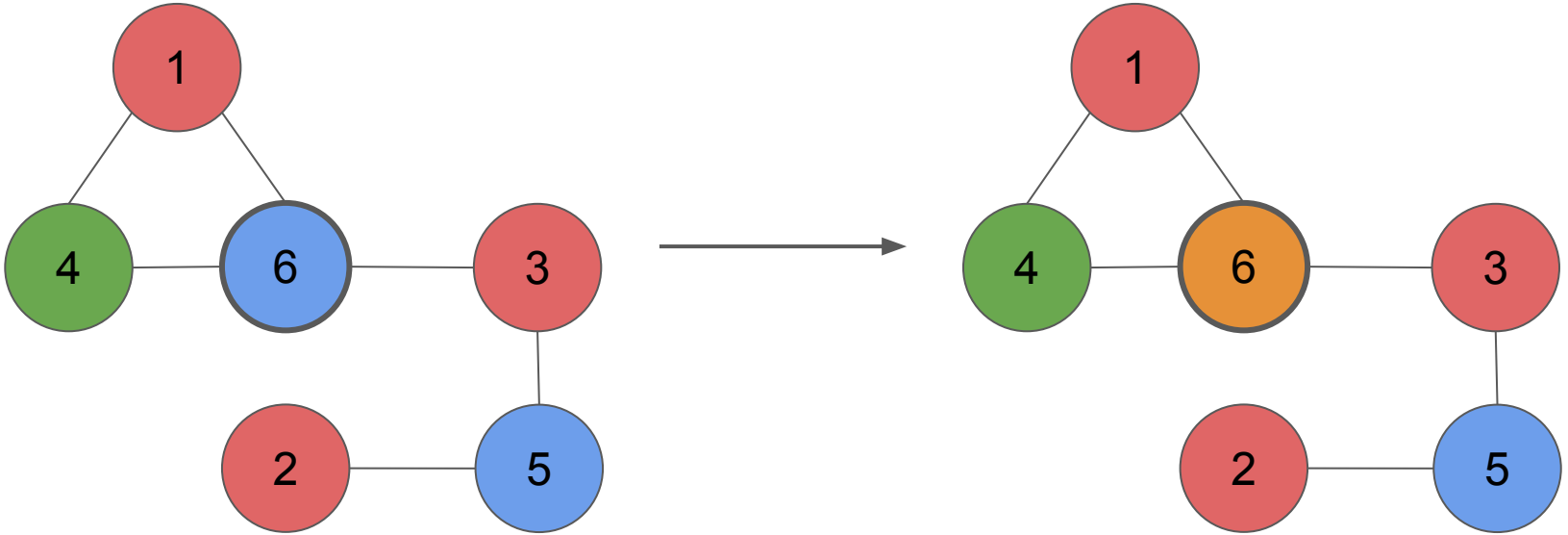
[1,2,1,2,3,3]

Cuándo dos soluciones son vecinas?

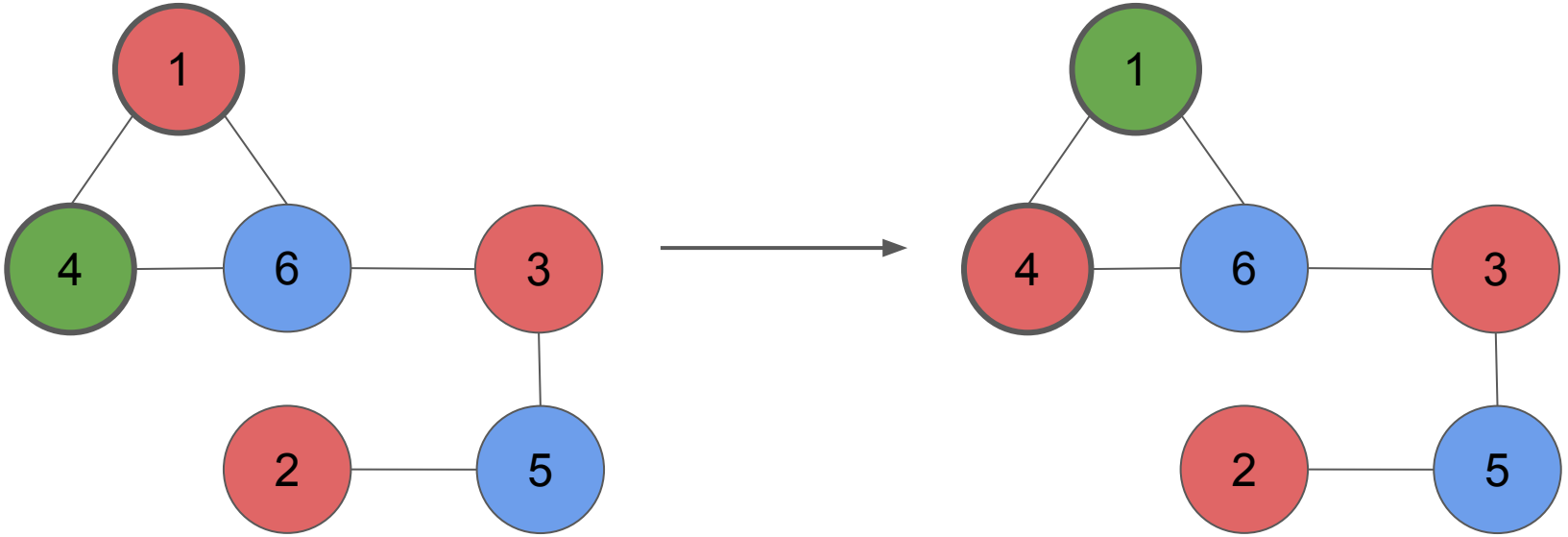
Operadores

- Change
- Swap

Operador Change



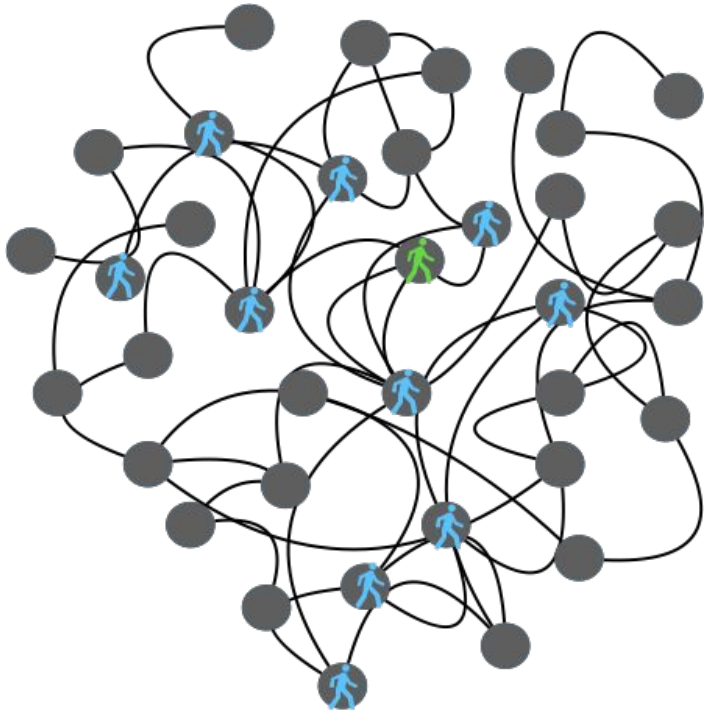
Operador Swap



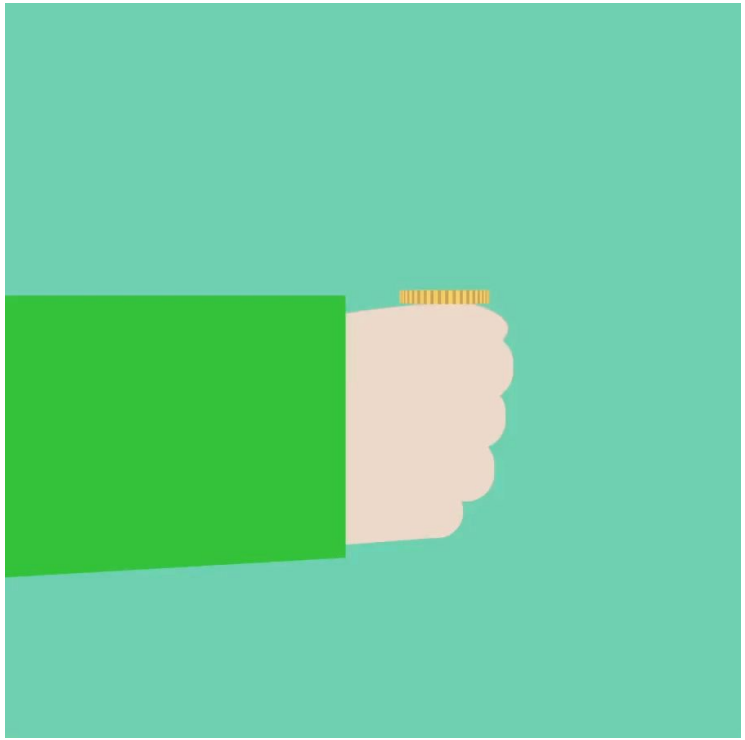
Cuál es el número de soluciones vecinas de cada solución para cada operador?

Cuánto me cuesta generarlas?

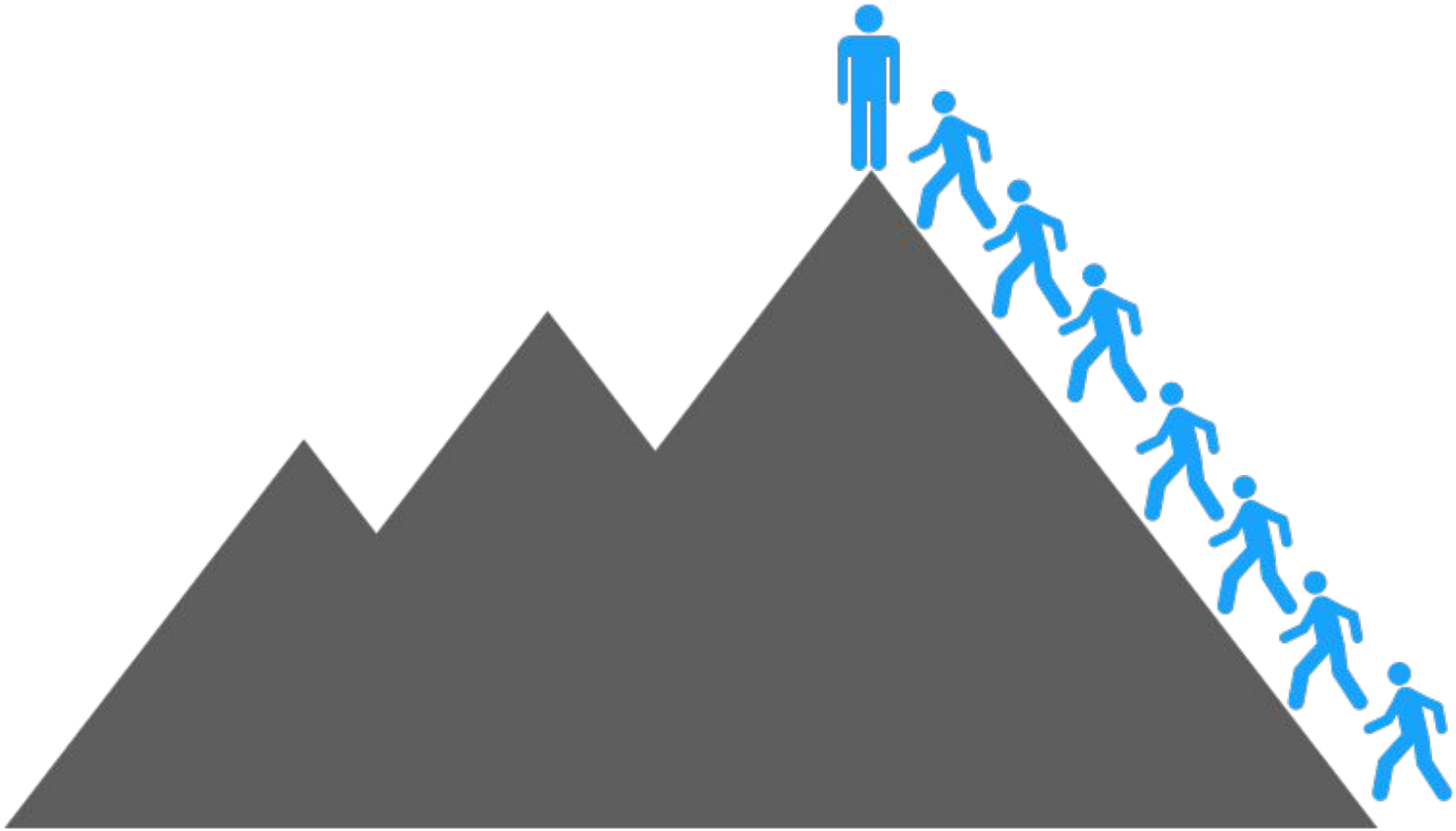
Paso 3: Explorar grafo



Random Walk

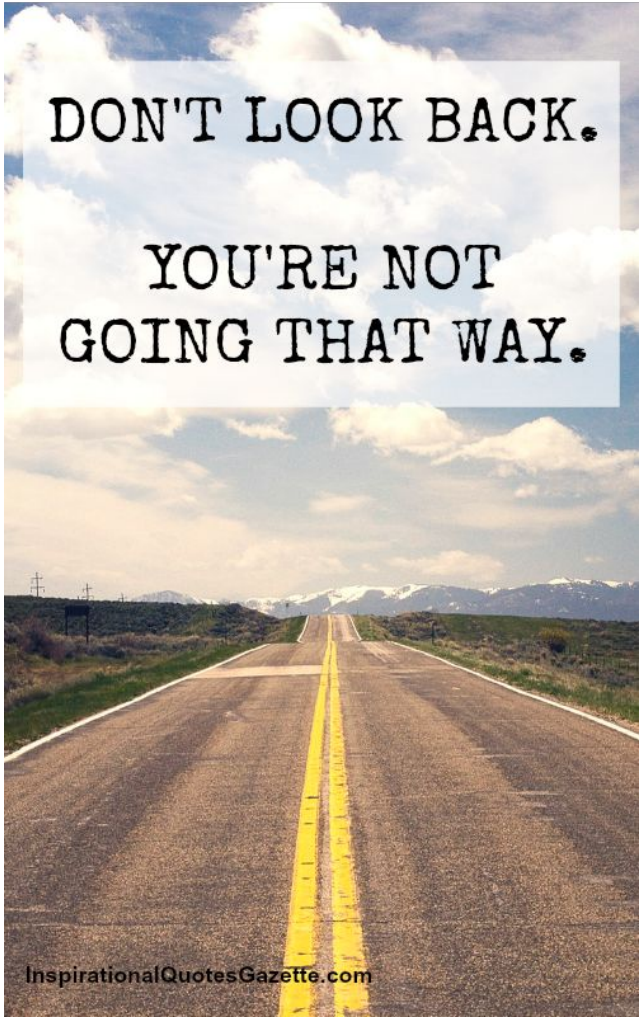


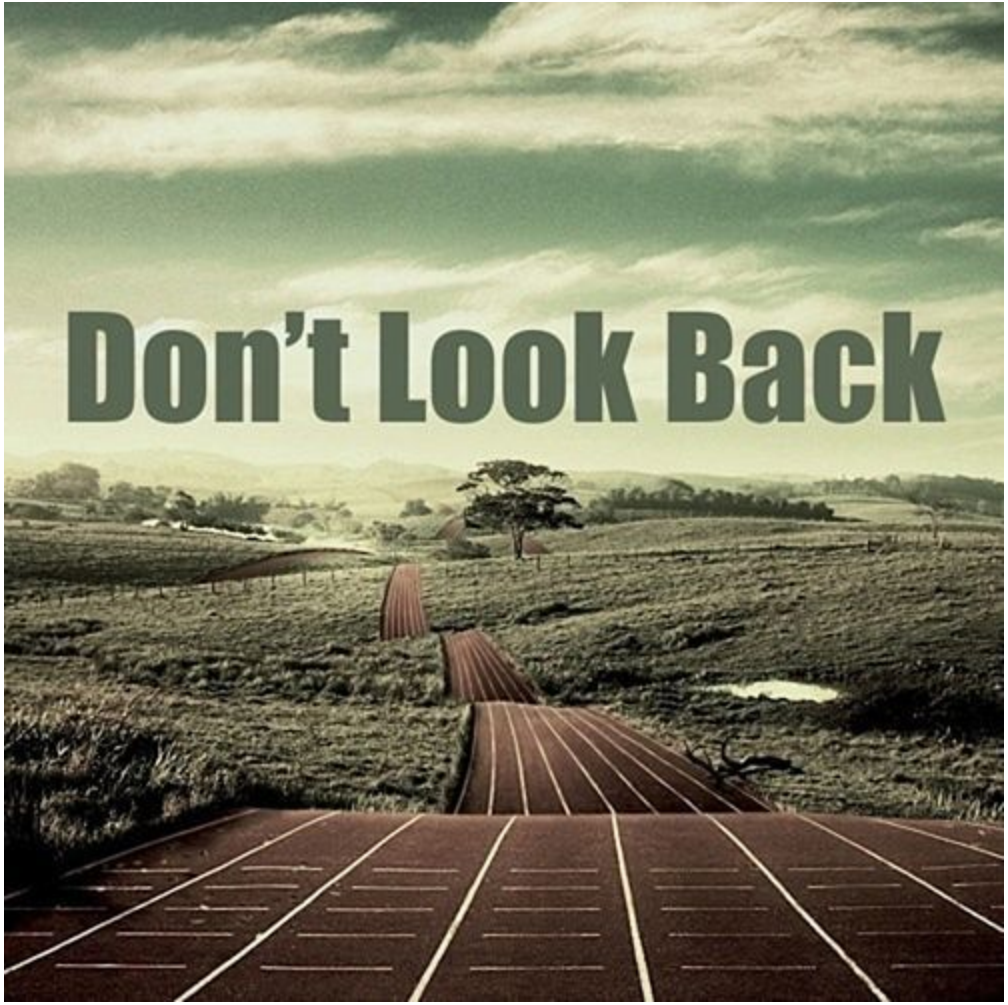
Hill Climbing



GRASP

Tabú Search


DON'T LOOK BACK.
YOU'RE NOT
GOING THAT WAY.
InspirationalQuotesGazette.com


Don't Look Back

Opción 1: Recordar últimas k soluciones y no volver incluso si son las mejores del vecindario.

Memoria de soluciones

Opción 2: Recordar últimos k vértices modificados y no volver a modificarlos incluso si llevan a una mejor solución.

Memoria de estructura (vértices)