Más sobre BFS
Programación Competitiva

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- BFS con múltiples orígenes
- BFS sobre grafo implícito
- Extensión de vértices

Algoritmo BFS

Recorrido en anchura. BFS

```cpp
vi dist;
// Calcula la distancia de los vertices al origen s
void bfs(int s) {
  queue<int> q;
  dist[s] = 0; visited[s] = true;
  q.push(s);
  while (!q.empty()) {
    int v = q.front(); q.pop();
    for (int w : adjList[v])
      if (!visited[w]) {
        dist[w] = dist[v] + 1;
        visited[w] = 1;
        q.push(w);
      }
  }
}
```

Complejidad $\mathcal{O}(V + E)$
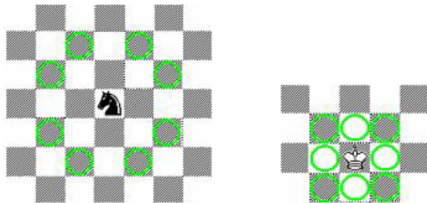Inicializar los vectores dist y visited en la función que llama a
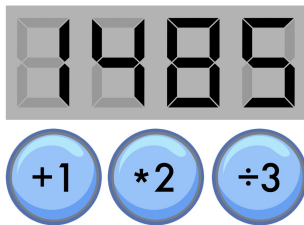
11352 Crazy King

King Peter lives in kingdom A, and his daughter in kingdom B. King recieved a letter telling that her daughter gave birth to a child. King is incredibly curious to see his grandchild! Unfortunately that's not gonna be that easy.

Kingdoms A and B are separated by a forest. There are lots of enemies in the forest, and King is not that curious to see them. If they attack king on his way to kingdom B, then he will never ever see his grandchild and daughter again because of lethal consequences.

Security Council of the King disposes information about location of the enemies, which makes the things easier for king. For some unknown reason a forest is $M \times N$ chessboard. (M is the number of rows, and N is the number of columns). $N, M \leq 100$ are positive integers.

Enemies of the King can ride horses as showed in the picture. Usually horses ride (or jump) that way in Chess. Unfortunately king can't take an airplane from point A to point B because it is not invented yet. So he moves the same way as chess-king does (refer to picture for details).

Problema 319 de ¡Acepta el reto!

- 319 - Pasa la calculador / 13069 - The calculator machine
- 11518 - Dominos 2