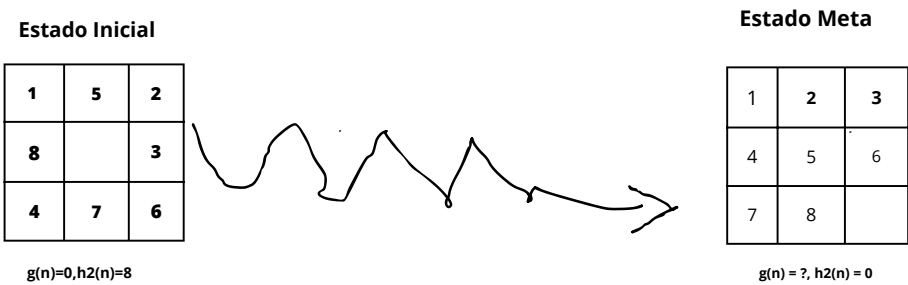


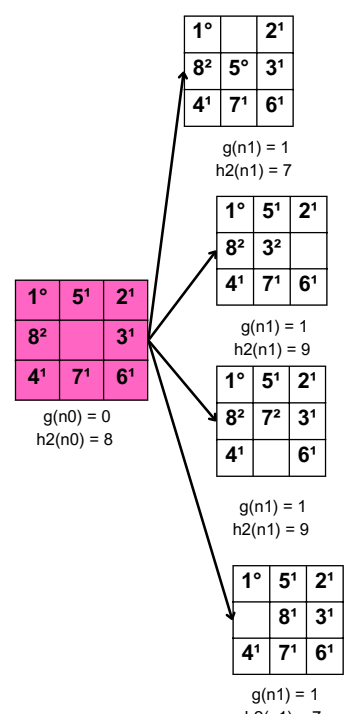
Nome completo: Lindy Saphira elmius

Professor: Grando Felipe

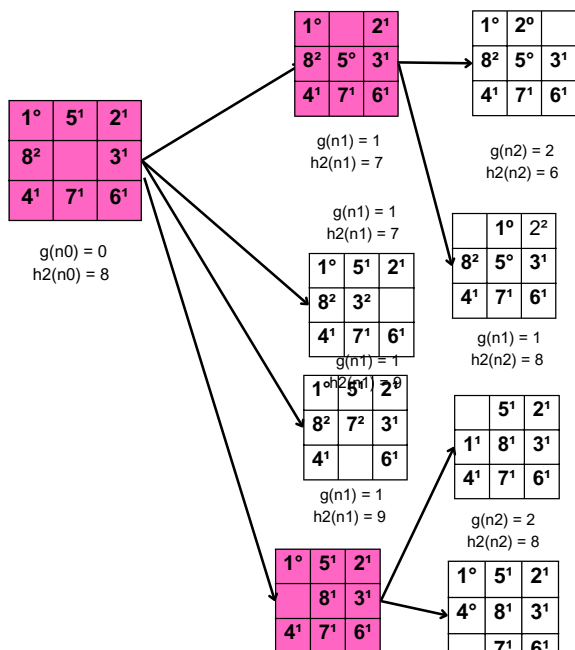
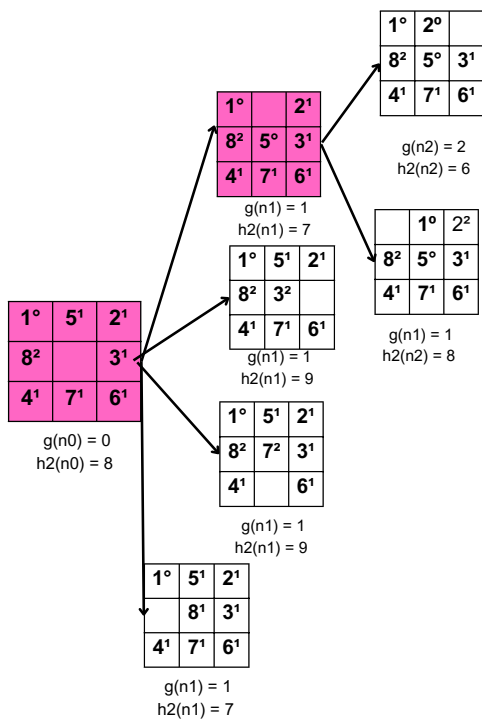
Material: Ia

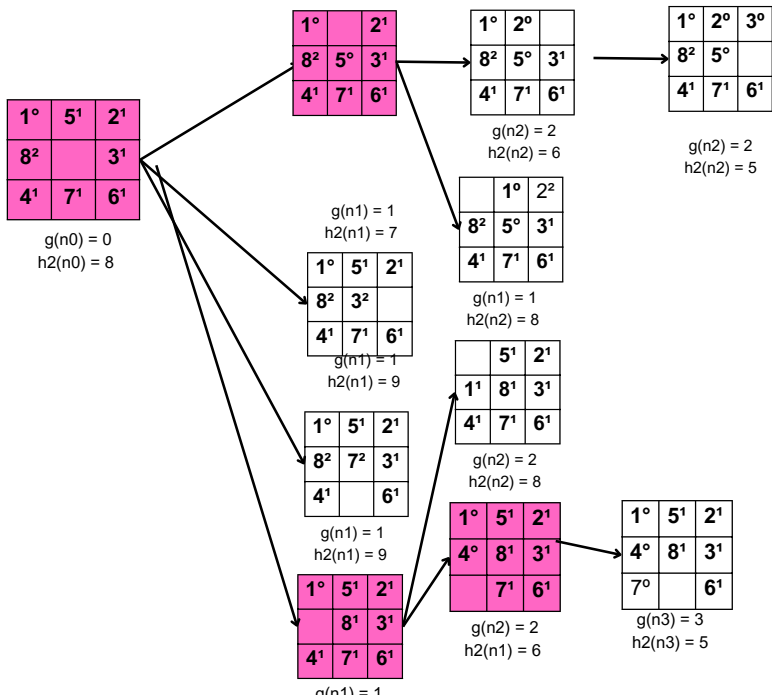
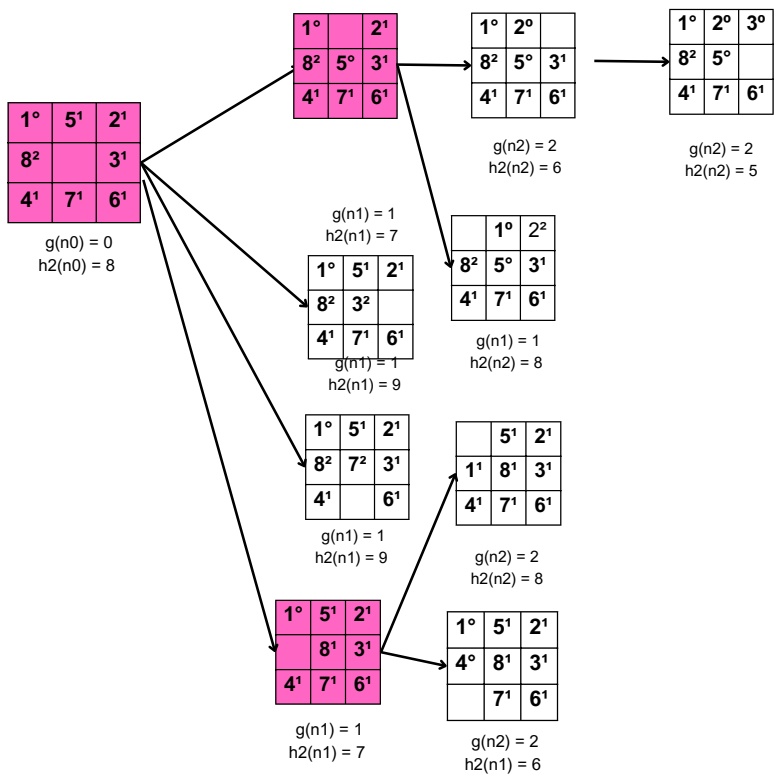


- Resolver o jogo de 8 peças com a busca A*
- Usar a distância de distância deManhattan como heurística ($h2(n)$)
- Apresentar a árvore de busca explorada pelo algoritmo
- Apresentar sequência de ações para a solução ótima encontrada com a busca
- Use como otimização a não expansão do estado cujo resultado é a ação reversa que trouxe a busca para o estado atual



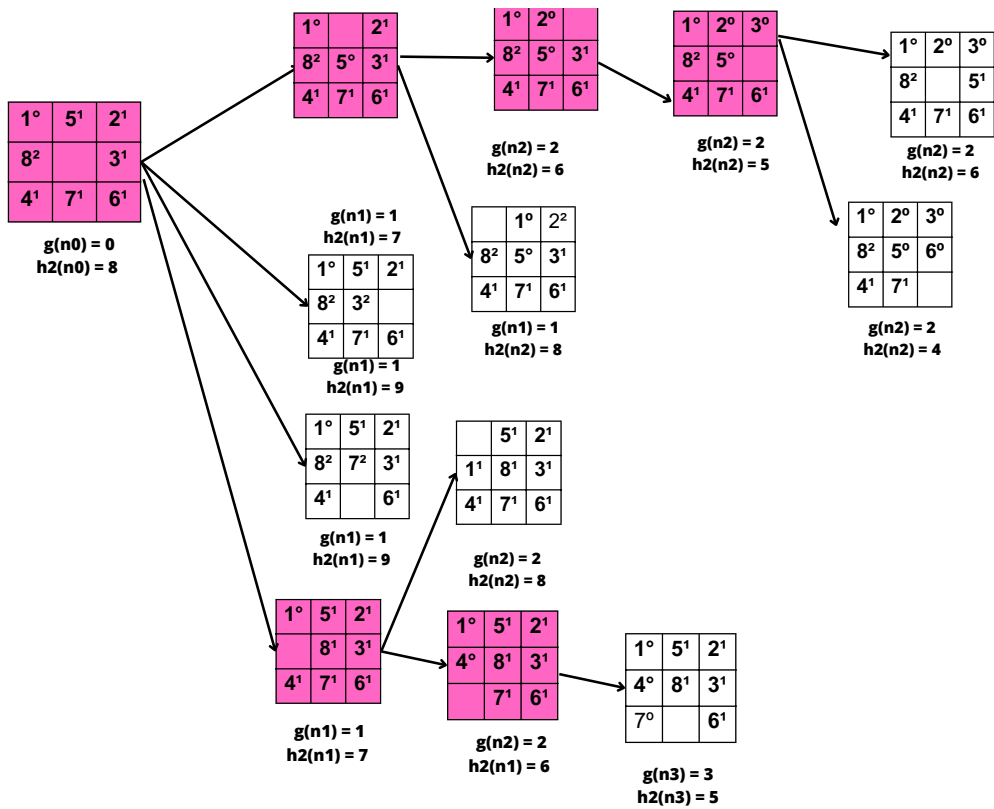
$$h2(n1) = /$$

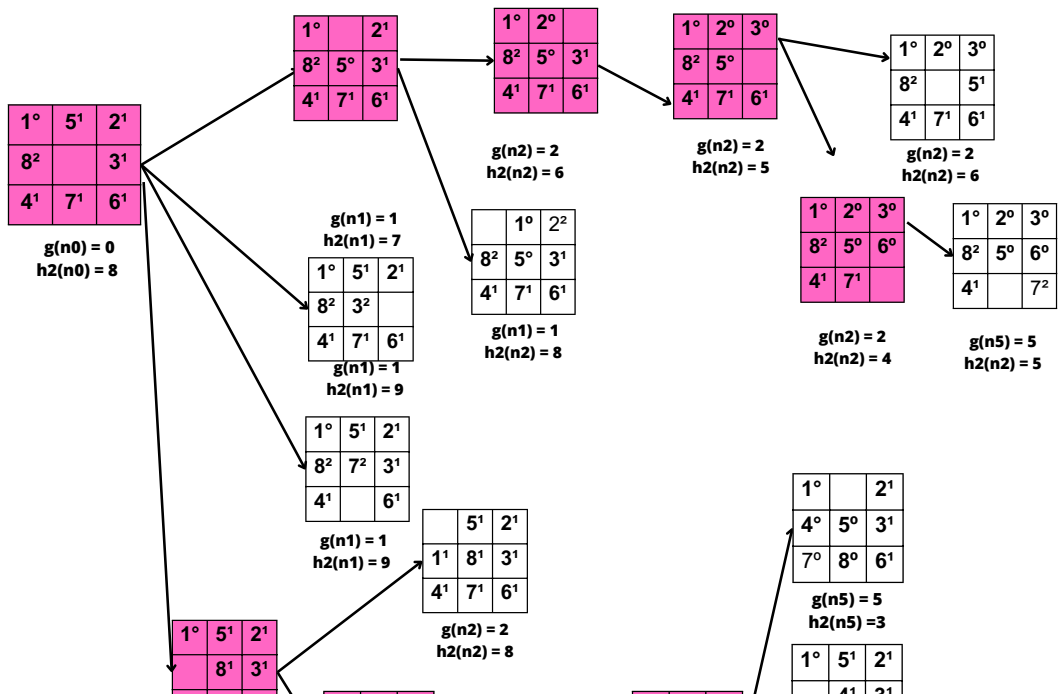


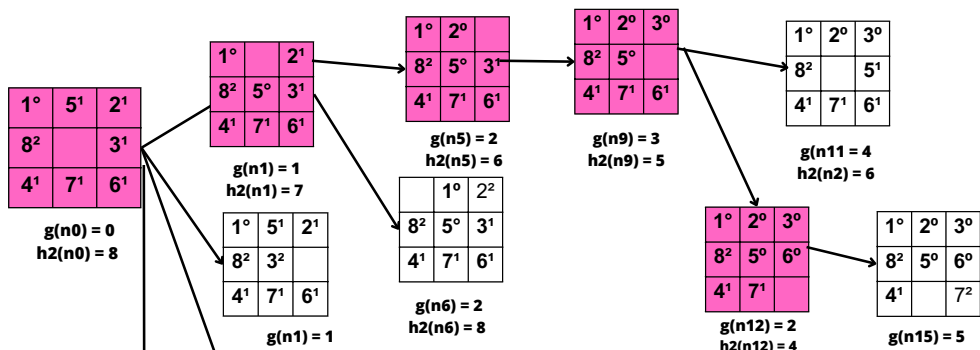
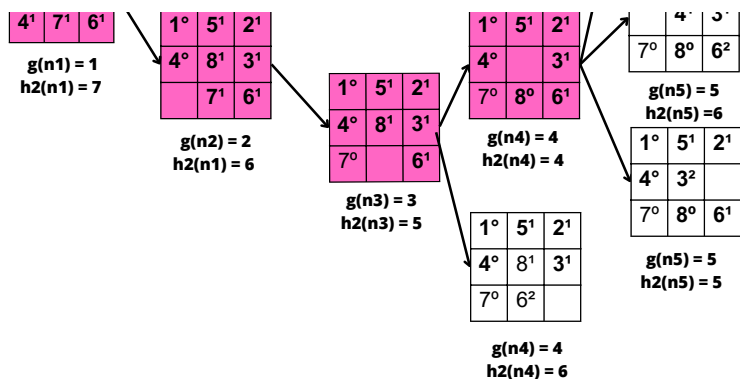


$$g(n1) = 1$$

$$h2(n1) = 7$$







The diagram shows a search tree for generating 3x3 magic squares. The root node is a 3x3 grid with values 1°, 5¹, 2¹; 8², 3¹; 4¹, 7¹, 6¹. It branches into several nodes, each representing a different state of the grid. Each node is labeled with its generation number $g(n)$ and hash value $h2(n)$. The nodes are connected by arrows, showing the sequence of operations. The final node shown is a 3x3 grid with values 1°, 2°, 3°; 8², 5¹, 6¹; 4¹, 7¹, 6¹, labeled $g(n23) = 8$ and $h2(n23) = 0$.

