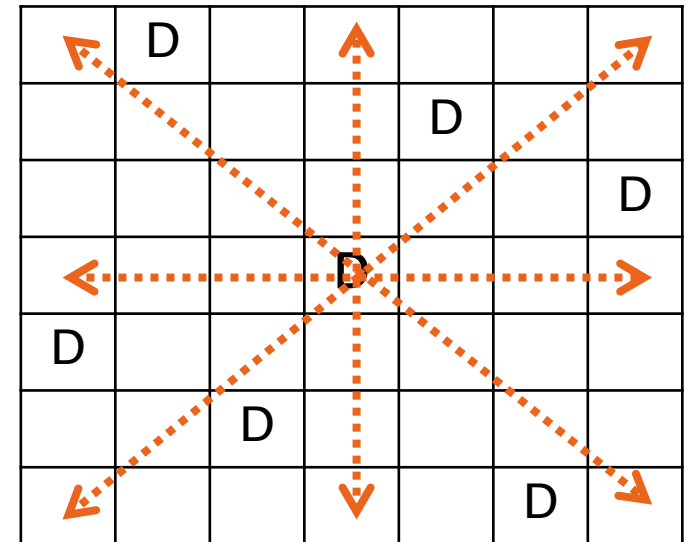


HW8

- ▶ Due: next Wed. 23:59:59
- ▶ Filename: HW#_StuID.zip
 - Ex) HW3_Q123456.zip

HW8

- ▶ 7 dwarfs are going to search for Snow White
- ▶ Every dwarf wants to be the first one seeing SW. Therefore, they don't want to see other dwarfs in their sights.
- ▶ Rules:
 - Dispose 7 dwarfs on a 7 by 7 land such that none of them is able to attack any other on the same row, column, or diagonal.



Requirements

- ▶ Write a program which lets users input the initial position of the first dwarf
 - Note that the index starts at (0,0)
- ▶ Place the rest 6 dwarfs on the land if possible
- ▶ Bonus:
 - Show all 6 fundamental solutions without symmetry operations, i.e., rotations or reflections. (total 40 solutions)

HW8

► Output format:

- A column sequence showing the column number of each position from row 0 to row 6
- E.g.) 0, 2, 4, 6, 1, 3, 5

	0	1	2	3	4	5	6
0	D						
1			D				
2					D		
3							D
4		D					
5				D			
6						D	

HW8

► Hints:

- Enumerate all possible moves
- Prune some unnecessary checks

	0	1	2	3	4	5	6
0	D	x	x	x	x	x	x
1	x	x					
2	x		x				
3	x			x			
4	x				x		
5	x					x	
6	x						x

	0	1	2	3	4	5	6
0	D	x	x	x	x	x	x
1	x	x	D	x	x	x	x
2	x	x	x				
3	x		x	x			
4	x		x		x		
5	x		x			x	
6	x		x				x