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Report HW #2

# 2 :

The first 12 coordinates popped from the stack are :

(6, 4), (6, 3), (6, 5), (7, 5), (8, 5), (8, 6), (8, 7), (8,8), (7, 8), (6, 6), (5, 4), (4, 4)

# 4:

The first 12 coordinates dequeued from the queue are :

(6, 4), (5, 4), (6, 5), (6, 3), (4, 4), (6, 6), (7, 5), (3, 4), (4, 5), (8, 5), (2, 4), (4, 6)

The difference between the two algorithms is that the stack implementation uses a depth first search whereas the queue implementation uses a breadth first search. This is because stacks are "last in, first out", whereas queues are "first in, first out". Stacks will explore deep into a path first, while queues will explore all paths in a "ripple" pattern.