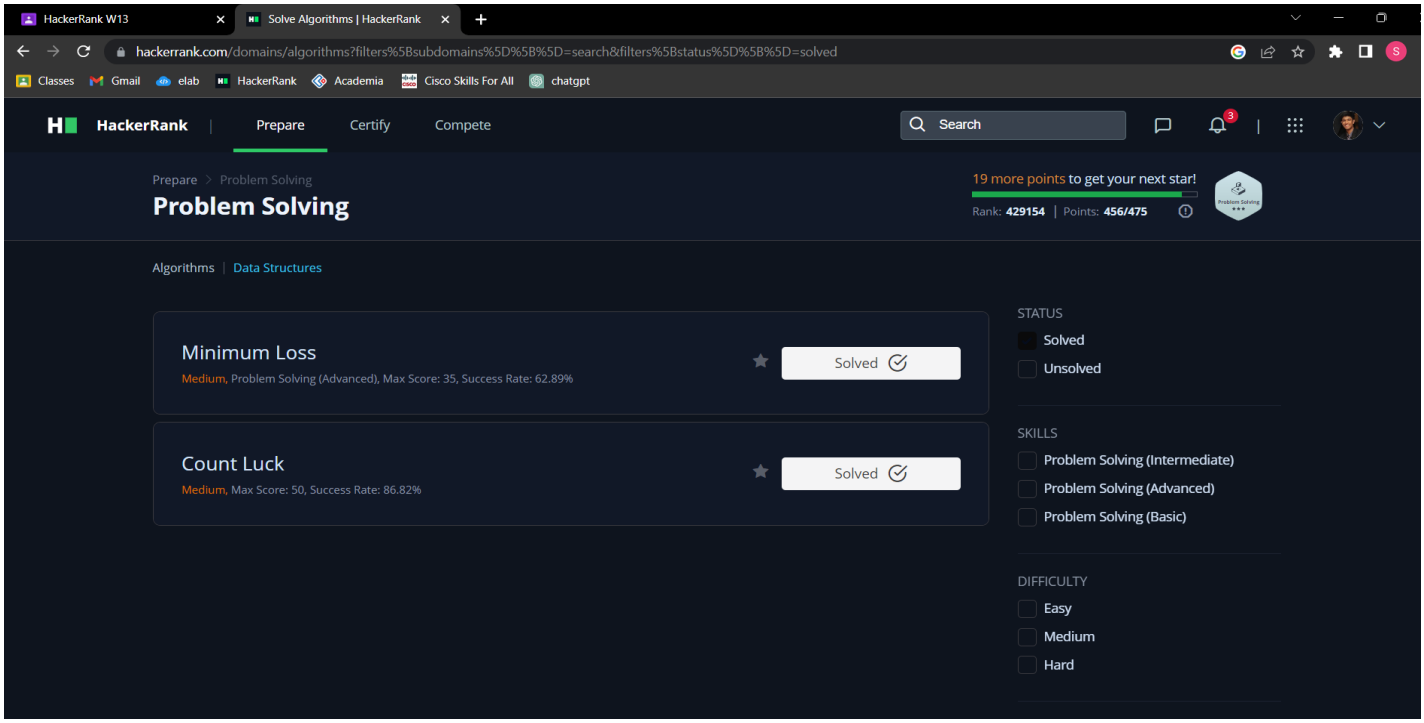
APP Week-14 HackerRank

Q. Count Luck

Code:

```
def countLuck(matrix, k):
    def valid_paths (i, j):
        return ([], [[i-1, j]])[valid_path(i-1, j)] \
                + ([], [[i+1, j]])[valid_path(i+1, j)] \
                + ([], [[i, j-1]])[valid_path(i, j-1)] \
                + ([], [[i, j+1]])[valid_path(i, j+1)]

    m, n = len(matrix), len(matrix[0])
    valid_path = lambda i, j: i >= 0 and i < m\
                        and j >= 0 and j < n\
                        and (matrix[i][j] == '.' or matrix[i][j] == '*')

    for i in range(m):
        matrix[i] = list(matrix[i])

    for i in range(m):
        try:
            j = matrix[i].index('M')
            break
        except:
            continue

    check_path = [([i, j], 0)]
    while check_path:
        (i, j), i_waves = check_path.pop()
        possible_paths = valid_paths(i, j)
        if matrix[i][j] == '*':
            return ('Oops!','Impressed')[i_waves == k]
        matrix [i][j] = 'X'
        if len(possible_paths) == 1:
            check_path += [(possible_paths[0], i_waves)]
        else:
            for coord in possible_paths:
                check_path += [(coord, i_waves+1)]
```

Screenshot:


HackerRank W13
Solve Algorithms | HackerRank
hackerrank.com/domains/algorithms?filters%5Bsubdomains%5D%5B%5D=search&filters%5Bstatus%5D%5B%5D=solved
Classes
Gmail
elab
HackerRank
Academia
Cisco Skills For All
chatgpt
HackerRank
Prepare
Certify
Compete
Search
Prepare > Problem Solving
Problem Solving
19 more points to get your next star!
Rank: 429154 | Points: 456/475
Algorithms | Data Structures
Minimum Loss
Medium, Problem Solving (Advanced), Max Score: 35, Success Rate: 62.89%
Solved
Count Luck
Medium, Max Score: 50, Success Rate: 86.82%
Solved
STATUS
Solved
Unsolved
SKILLS
Problem Solving (Intermediate)
Problem Solving (Advanced)
Problem Solving (Basic)
DIFFICULTY
Easy
Medium
Hard