

OUTPUT FILE

Challenge : 01 (Challenge 1: Team Contribution Multiplier)

Example 1

```
PS C:\Users\Syscom\Desktop\DSA-Logic-Forge> & C:\  
Contributions : [1, 2, 3, 4]  
Brute Force Approach : [24, 12, 8, 6]  
Average Approach : [24, 12, 8, 6]  
Optimal Approach : [24, 12, 8, 6]  
PS C:\Users\Syscom\Desktop\DSA-Logic-Forge> □
```

Example 2

```
PS C:\Users\Syscom\Desktop\DSA-Logic-Fo  
Contributions : [-1, 1, 0, -3, 3]  
Brute Force Approach : [0, 0, 9, 0, 0]  
Average Approach : [0, 0, 9, 0, 0]  
Optimal Approach : [0, 0, 9, 0, 0]  
PS C:\Users\Syscom\Desktop\DSA-Logic-Fo
```

Challenge 2: Password Recovery Window

Example 1

```
2.py"  
Input: log = 'ADOBECODEBANC', pattern = 'ABC'  
Brute Force : BANC  
Optimal : BANC  
PS C:\Users\Syscom\Desktop\DSA-Logic-Forge> □
```

Example 2

```
2.py"  
Input: log = 'a', pattern = 'a'  
Brute Force : a  
Optimal : a  
PS C:\Users\Syscom\Desktop\DSA-Logic-Forge> □
```

Example 3

```
2.py"  
Input: log = 'a', pattern = 'aa'  
Brute Force :  
Optimal :  
PS C:\Users\Syscom\Desktop\DSA-Logic-Forge> □
```

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Challenge 3: Balanced Performance Score

Example 1

Input: scoresA = [1, 2], scoresB = [3, 4]
Median : 2.5

Example 2

```
3.py"
Input: scoresA = [1, 3], scoresB = [2]
Median : 2
```

Challenge 4 : The Deep Storage Inventory Search

Example 1

```
4.py"
Input: matrix = [[1, 5, 9], [10, 11, 13], [12, 13, 15]], k = 8
Kth smallest Element Using Brute Force : 13
Kth smallest Element Using Heap : 13
Kth smallest Element Using Binary Search (Optimal) : 13
PS C:\Users\Syscom\Desktop\DSA-Logic-Forge> █
```

Challenge 5: Fix the Broken Expression

Example 1

```
5.py"
Input : ()()() , Output : ['()()()', '(())()']
Input : (a)()() , Output : ['(a())()', '(a)()()']
Input : )(       , Output : ['']
Input : ()       , Output : ['()']
Input : abc      , Output : ['abc']
Input : (((      , Output : []
```

OUTPUT FILE

Challenge 6: Tower of Hanoi Algorithm

Example 1

```
Input : N = 3
Disk 1 moved from A to C
Disk 2 moved from A to B
Disk 1 moved from C to B
Disk 3 moved from A to C
Disk 1 moved from B to A
Disk 2 moved from B to C
Disk 1 moved from A to C
```

Example 2

```
6.py"
Input : N = 4
Disk 1 moved from A to B
Disk 2 moved from A to C
Disk 1 moved from B to C
Disk 3 moved from A to B
Disk 1 moved from C to A
Disk 2 moved from C to B
Disk 1 moved from A to B
Disk 4 moved from A to C
Disk 1 moved from B to C
Disk 2 moved from B to A
Disk 1 moved from C to A
Disk 3 moved from B to C
Disk 1 moved from A to B
Disk 2 moved from A to C
Disk 1 moved from B to C
PS C:\Users\Syscom\Desktop\DSA-Logic-Forge> █
```