

OUTPUTS SCREENSHOTS

CHALLENGE 1:

BRUTE FORCE CODE:

```
D:\SZ-2025\NED\DSA\challen > Enter number of team members: 4  
Enter contribution scores:  
1 2 3 4  
Impact array:  
24 12 8 6  
-----  
Process exited after 7.657 seconds with return value 0  
Press any key to continue . . . |
```

OPTIMIZED CODE:

```
D:\SZ-2025\NED\DSA\challen > Enter number of team members: 4  
Enter contribution scores:  
1 2 3 4  
Impact array:  
24 12 8 6  
-----  
Process exited after 7.211 seconds with return value 0  
Press any key to continue . . . |
```

CHALLENGE 2:

BRUTE FORCE CODE:

```
D:\SZ-2025\NED\logic forge f > Enter log string: ADOBECODEBANC  
Enter pattern string: ABC  
Minimum window: BANC  
-----  
Process exited after 37.19 seconds with return value 0  
Press any key to continue . . . |
```

OPTIMIZED CODE:

```
D:\SZ-2025\NED\logic forge F X + | v

Enter log string: ADOBECODEBANC
Enter pattern string: ABC
Minimum window: BANC

-----
Process exited after 18.4 seconds with return value 0
Press any key to continue . . . |
```

CHALLENGE 3:

BRUTE FORCE CODE:

```
D:\SZ-2025\NED\logic forge F X + | v

Enter size of Team A scores: 2
Enter size of Team B scores: 1
Enter sorted scores of Team A:
1 3
Enter sorted scores of Team B:
2
Median score: 2

-----
Process exited after 51.21 seconds with return value 0
Press any key to continue . . . |
```

OPTIMIZED CODE:

```
D:\SZ-2025\NED\logic forge F X + | v

Enter size of Team A scores: 2
Enter size of Team B scores: 1
Enter sorted scores of Team A:
1 3
Enter sorted scores of Team B:
2
Median score: 2

-----
Process exited after 7.766 seconds with return value 0
Press any key to continue . . . |
```

CHALLENGE 4:

BRUTE FORCE CODE:

```
D:\SZ-2025\NED\logic forge F X + | v  
13  
-----  
Process exited after 0.03074 seconds with return value 0  
Press any key to continue . . . |
```

OPTIMIZED CODE:

```
D:\SZ-2025\NED\logic forge F X + | v  
13  
-----  
Process exited after 0.03486 seconds with return value 0  
Press any key to continue . . . |
```

CHALLENGE 5:

BRUTE FORCE CODE:

```
D:\SZ-2025\NED\logic forge F X + | v  
Input: "OOCOO"  
Output: ["COOCO", "COCOO"]  
  
Input: "(a)OOOO"  
Output: ["(a)COOO", "CaOOOO"]  
  
Input: "OC"  
Output: [""]  
  
Input: "O"  
Output: ["O"]  
  
Input: "abc"  
Output: ["abc"]  
  
Input: "CCC"  
Output: [""]  
-----  
Process exited after 0.0381 seconds with return value 0  
Press any key to continue . . . |
```

OPTIMIZED CODE:

```
D:\SZ-2025\NED\logic forge F + |   
  
Input: "()()()"  
Output: ["(())()", "()()"]  
  
Input: "(a)()()"  
Output: ["(a())()", "(a)()()"]  
  
Input: ")()"  
Output: [""]  
  
Input: "()"  
Output: ["()"]  
  
Input: "abc"  
Output: ["abc"]  
  
Input: "((("  
Output: [""]  
  
-----  
Process exited after 0.04194 seconds with return value 0  
Press any key to continue . . . |
```

CHALLENGE 6:

BRUTE FORCE CODE:

```
D:\SZ-2025\NED\logic forge F + |   
  
Enter number of disks: 2  
Disk 1 moved from A to B  
Disk 2 moved from A to C  
Disk 1 moved from B to C  
  
-----  
Process exited after 9.545 seconds with return value 0  
Press any key to continue . . . |
```

OPTIMIZED CODE:

```
D:\SZ-2025\NED\logic forge F X + ▾  
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  
  
-----  
Process exited after 29.25 seconds with return value 0  
Press any key to continue . . . |
```