

PSET1:

OUTPUTS

Challenge1:

Team_Contribution_Multiplier

The screenshot shows a PyCharm interface. On the left is a file tree with files scratch_13.py through scratch_17.py. The current file is Team_Contribution_Multiplier.py. The code in the editor is:

```
self.impact[i]*=self.right
self.right*=self.contributions[i]
return self.impact
t=Teamwork([1,2,5,6])
print(t.impact_calculation())
```

The run tab is selected, showing the command: C:\Users\Hp\AppData\Local\Programs\Python\Python312\python.exe C:\Users\Hp\AppData\Roaming\JetBrains\PyCharmCE2021.1\scratches\Team_Contribution_Multiplier.py. The terminal output shows:

```
C:\Users\Hp\AppData\Local\Programs\Python\Python312\python.exe C:\Users\Hp\AppData\Roaming\JetBrains\PyCharmCE2021.1\scratches\Team_Contribution_Multiplier.py
[60, 30, 12, 10]

Process finished with exit code 0
```

When;

Input= [1, 2, 5, 6]

Output= [60, 30, 12, 10]

Challenge2:

Password_Recovery_Window

The screenshot shows a PyCharm interface. On the left is a file tree with files scratch_9.py through scratch_11.py and scratch_15.py. The current file is scratch_15.py. The code in the editor is:

```
return self.log[self.start:self.start + self.maxLength]
r = Recovery(log: 'ADOBECODEBANC', pattern: 'ABC')
print(r.window_recovery())
```

The run tab is selected, showing the command: C:\Users\Hp\AppData\Local\Programs\Python\Python312\python.exe C:\Users\Hp\AppData\Roaming\JetBrains\PyCharmCE2021.1\scratches\scratch_15.py. The terminal output shows:

```
C:\Users\Hp\AppData\Local\Programs\Python\Python312\python.exe C:\Users\Hp\AppData\Roaming\JetBrains\PyCharmCE2021.1\scratches\scratch_15.py
BANC

Process finished with exit code 0
```

When;

Input:

Log= 'ADOBECODEBANC'

Pattern= 'ABC'

Output= BANC

Challenge3:

Balanced_Performance_Score

The screenshot shows a PyCharm interface. On the left, there's a file tree with files like scratch_13.py, scratch_14.py, scratch_15.py, and scratch_14.py (which is currently selected). In the main editor area, the code for scratch_14.py is displayed:

```
41     return (self.prev + self.current) / 2
42 m=median(scoreA: [1,2], scoreB: [3,4])
43 print(m.median_calculation())
...
```

Below the editor, the terminal window shows the command run and the output:

```
C:\Users\Hp\AppData\Local\Programs\Python\Python312\python.exe C:\Users\Hp\AppData\Roaming\JetBrains\PyCharmCE2024.2\scr...
```

The output is 2.5.

When;

Input:

scoreA= [1, 2]

scoreB= [3, 4]

Output= 2.5

Challenge4:

The_Deep_Storage_Inventory_Search

The screenshot shows a PyCharm interface. On the left, there's a file tree with files like circle.py, employee.py, feedback.csv, inventory.py, lab 8 Q1.py, lab 10 Q1.py, and Challenge4_Deep_Storage_Inventory_Search.py (which is currently selected). In the main editor area, the code for Challenge4_Deep_Storage_Inventory_Search.py is displayed:

```
20     return low
21 print(SmallestKthTerm(matrix: [[1,2,3],[4,5,6],[7,12,13]], kth: 8))
```

Below the editor, the terminal window shows the command run and the output:

```
C:\Users\Hp\AppData\Local\Programs\Python\Python312\python.exe C:\Users\Hp\AppData\Roaming\JetBrains\PyCharmCE2024.2\scr...
```

The output is 12.

When;

Input:

Matrix= [[1, 2, 3], [4, 5, 6], [7, 12, ,13]]

Kth=8

Output= 12

Challenge5:

Fix_The_Broken_Expression

```
31     queue.append(next_s)
32 return result
33 print(removeInvalidParentheses("(q)"))

Run scratch_7 ×

C: C:\Users\Hp\AppData\Local\Programs\Python\Python312\python.exe C:\Users\Hp\AppData\Roaming\JetBrains\PyCharm2021.2\scratches\scratch_7.py
[ '(q)' ]

Process finished with exit code 0
```

When;

Input= ((q))

Output= (q)

Challenge6:

Tower_Of_Hanoi_Algorithm

```
challenge4_brute 8     towerOfHanoi( N: 3 , from_rod: "A" , to_rod: "C" , aux_rod: "B" )
Challenge4_Deep
Challenge6_Tower
circle.py
employee.py
...
.

Run Challenge6_Tower_Of_Hanoi ×

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 finished with exit code 0
```

When;

Input:

Output= Initial movement from A to C till the last movement same from A to C

N=3

From_rod=A

Aux_rod= B

To_rod= C