

## Challenge 1

EXPLORER

...

Challenge1\_TheSmartCityTemperature.py

Challenge2\_EmergencyEv

PSET3

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Challenge1\_TheSmart...

Challenge2\_Emergenc...

Document.rtf

README.md

Challenge1\_TheSmartCityTemperature.py > ...

```
2 N, K, Q = map(int, input().split())
3 temps = list(map(int, input().split()))
4
5 alert = [0] * N
6
7 for i in range(N):
8     for j in range(i + 1, N):
9         if temps[j] >= temps[i] + K or temps[j] <= temps[i] - K:
10             alert[i] = j
11             break
12 for _ in range(Q):
13     parts = input().split()
14
15     if parts[0] == "NEXT":
16         X = int(parts[1])
17         if alert[X] == 0:
18             print("No Alert")
19         else:
20             print(alert[X])
21
22     elif parts[0] == "COUNT":
23         X = int(parts[1])
```

PROBLEMS

OUTPUT

TERMINAL

...

powershell + v

PS D:\codes\PSET3> & D:\SoftwareDownloads\MySQL\python.exe d:/codes/PSET3/Challenge1\_TheSmartCityTemperature.py

8 3 4

73 74 75 71 69 72 76 73

NEXT 0

4

NEXT 3

6

COUNT 0 7

7

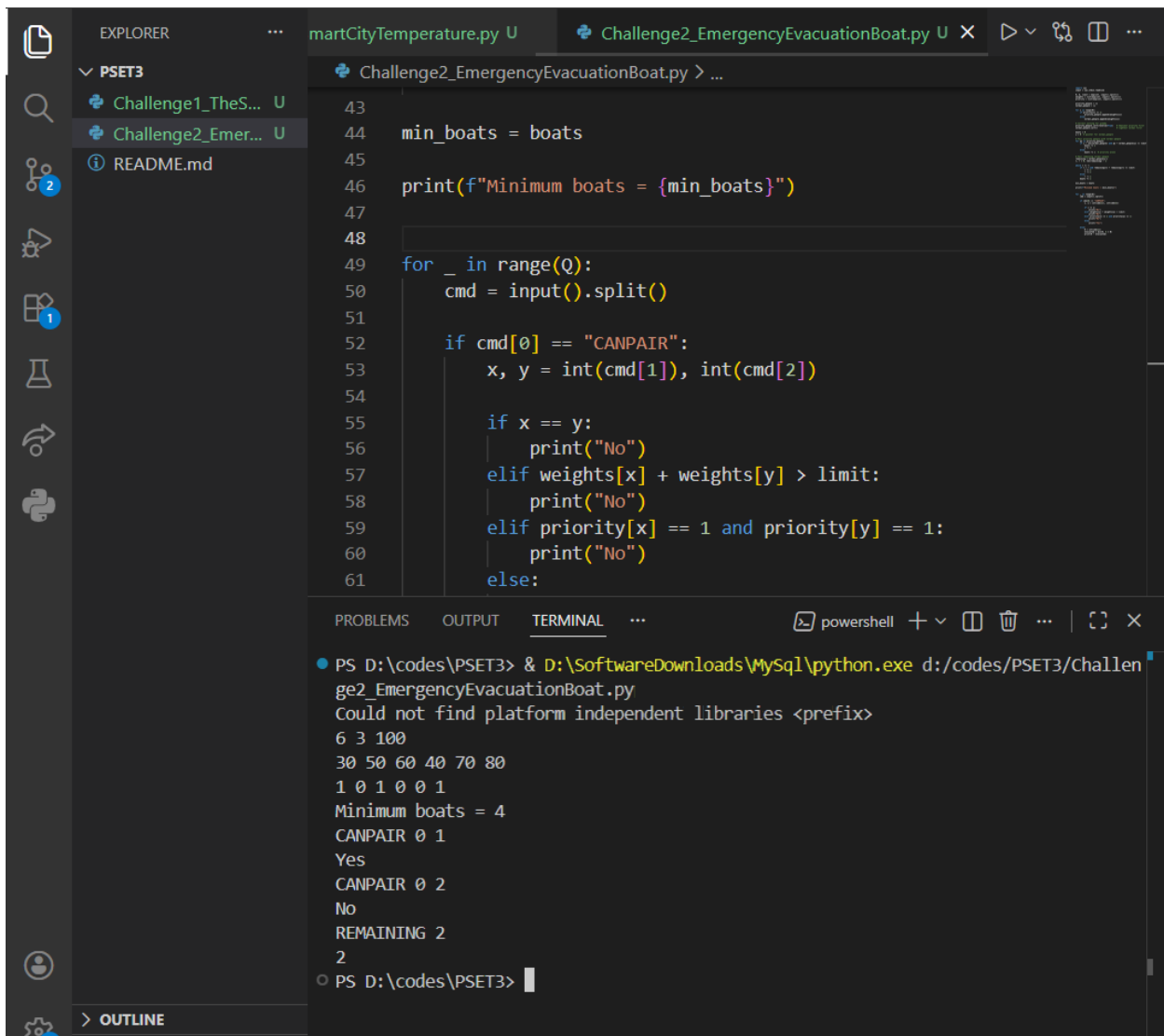
COUNT 4 7

3

PS D:\codes\PSET3>

OUTLINE

## Challenge 2



The image shows a Visual Studio Code editor window with a Python file named `Challenge2_EmergencyEvacuationBoat.py` open. The file is located in a directory named `PSET3`. The code in the file is as follows:

```
43 min_boats = boats
44
45 print(f"Minimum boats = {min_boats}")
46
47
48
49 for _ in range(Q):
50     cmd = input().split()
51
52     if cmd[0] == "CANPAIR":
53         x, y = int(cmd[1]), int(cmd[2])
54
55         if x == y:
56             print("No")
57         elif weights[x] + weights[y] > limit:
58             print("No")
59         elif priority[x] == 1 and priority[y] == 1:
60             print("No")
61         else:
```

The terminal window at the bottom shows the execution of the script using PowerShell. The output is as follows:

```
PS D:\codes\PSET3> & D:\SoftwareDownloads\MySQL\python.exe d:/codes/PSET3/Challenge2_EmergencyEvacuationBoat.py
Could not find platform independent libraries <prefix>
6 3 100
30 50 60 40 70 80
1 0 1 0 0 1
Minimum boats = 4
CANPAIR 0 1
Yes
CANPAIR 0 2
No
REMAINING 2
2
PS D:\codes\PSET3>
```

### Challenge 3

```

PS D:\codes\PSET3> & D:\SoftwareDownloads\MySQL\python.exe d:/codes/PSET3/Challen
ge3.py
Could not find platform independent libraries <prefix>
3 9 2
S 1 2
S 1 3
B 2 5
B 3 9
F 1
Answer: 2 1
U 1 2
B 3 6
F 1
Answer: 3 2
F 2
Answer: EMPTY
PS D:\codes\PSET3>

```

## Challenge 4

```
PS D:\codes\PSET3> & D:\SoftwareDownloads\MySQL\python.exe d:/codes/PSET3/challen
ge4.py
Could not find platform independent libraries <prefix>
cbaebabacd
abc
[0, 6]
PS D:\codes\PSET3>
```

## Challenge 5

```
PS D:\codes\PSET3> & D:\SoftwareDownloads\MySQL\python.exe d:/codes/PSET3/Challen
ge5.py
Could not find platform independent libraries <prefix>
● babad
bab
PS D:\codes\PSET3>
○ PS D:\codes\PSET3>
```

## Challenge 6

```
PS D:\codes\PSET3> & D:\SoftwareDownloads\MySQL\python.exe d:/codes/PSET3/Challe
ge6.py
● Could not find platform independent libraries <prefix>
2 1 2 5 3 2
2
○ PS D:\codes\PSET3>
```