Submission 14470574

Edited from 14470532

DATE	PROBLEM	JUDGEMENT	RUNTIME	LANGUAGE	TEST CASES
20:24:09	I Can Guess the Data Structure!	✅ Accepted	0.11 s	Python 3	2/2

✅ ✅

Files submitted

Mainfile: guessthedatastructure.py

guessthedatastructure.py   ⬇ Download guessthedatastructure.py

```python
1  import sys
2
3  def guessTheDataStructure():
4      lines = [line for line in sys.stdin]
5      i = 0
6      while i < len(lines):
7          isQueue = True
8          isStack = True
9          isPriorityQueue = True
10
11         queue = []
12         stack = []
13         priorityQueue = []
14
15         n = int(lines[i])
16         i += 1
17
18         for _ in range(n):
19             command, value = lines[i].split()
20             value = int(value)
21             if command == "1":
22                 queue.append(value)
23                 stack.append(value)
24                 priorityQueue.append(value)
```

```python
            elif command == "2":
                if isQueue:
                    if queue and value == queue[0]:
                        queue.pop(0)
                    else:
                        isQueue = False
                if isStack:
                    if stack and value == stack[-1]:
                        stack.pop()
                    else:
                        isStack = False
                if isPriorityQueue:
                    if priorityQueue and value ==
    max(priorityQueue):
                        priorityQueue.pop(

    priorityQueue.index(max(priorityQueue)))
                    else:
                        isPriorityQueue = False

            i += 1

        if isPriorityQueue and not isStack and not isQueue:
            print("priority queue")
        elif isQueue and not isStack and not isPriorityQueue:
            print("queue")
        elif isStack and not isQueue and not isPriorityQueue:
            print("stack")
        elif not isQueue and not isStack and not
    isPriorityQueue:
            print("impossible")
        else:
            print("not sure")


guessTheDataStructure()
```