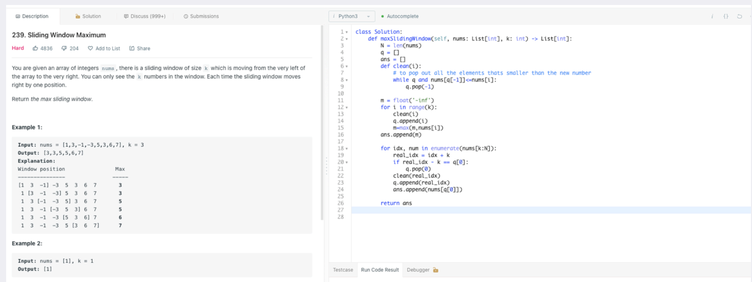
Amazon OA2

Cut off Rank — Easy, Time: O(N)

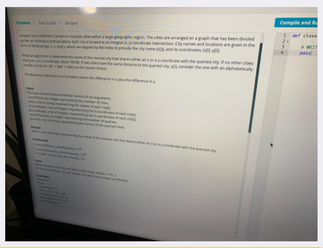
Fill The Truck — EASY - Greedy

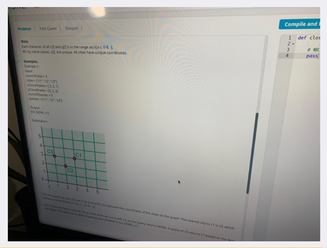
```python
import heapq as hq

def fill_the_truck(num, boxes, unitSize, unitsPerBox, truckSize):
    buffer = []

    for idx, num_box in enumerate(boxes):
        num_units = unitsPerBox[idx]
        for _ in range(num_box):
            hq.heappush(buffer, -1*num_units)
    print(buffer)
    count = 0
    for _ in range(truckSize):
        if len(buffer) > 0:
            count -= hq.heappop(buffer)

    return count

print(fill_the_truck(3, [1,2,3], 3, [3,2,1], 3))
```

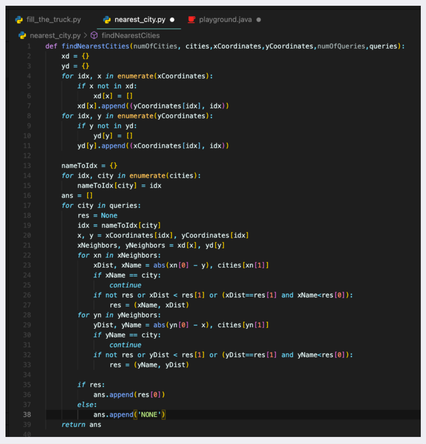
Disk Space Analysis



Nearest City







Easy lah — Subtree with Maximum Average

```python
class Solution:
    def breakPalindrome(self, palindrome: str) -> str:
        if len(palindrome)<2:
            return ""
        lst=list(palindrome)
        for i in range((len(palindrome))//2):
            if palindrome[i]!="a":
                lst[i]="a"
                return "".join(lst)
        lst[-1]="b"
        return "".join(lst)
```

Break a Palindrome

Dict and then items() to get the smallest — Smallest Negative Balance

Desc counter — Find The Highest Profit

DP, get prime number first by another DP — Ways to Split String Into Prime Numbers

Create — Fetch Items to Display

Greedy, recursive — Packaging Automation

Divide and conquer, cut it in half and calculate the minDist in two parts, and then calculate the middle part, pick points that has xDist and yDist shorter than current minDist — Min Distance Between Robots

Union and find — Power Grid

$$ {}_nC_r = \frac{n!}{r!(n-r)!} $$

Combination, — Count Teams