

kth pair XY plane.py - D:/DAA/kth pair XY plane.py (3.12.4)

File Edit Format Run Options Window Help

```
def pClosest(points, K):  
    points.sort(key = lambda K: K[0]**2 + K[1]**2)  
    return points[:K]  
points = [[1,3], [-2,2], [5,8], [0,1]]  
K = 2  
print(pClosest(points, K))
```

IDLE Shell 3.12.4

File Edit Shell Debug Options Window Help

Python 3.12.4 (tags/v3.12.4:0e0a4ba, Jun 6 2024, 19:30:16) [MSC v.1940 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>> = RESTART: D:/DAA/kth pair XY plane.py

[[3, 3], [-2, 4]]

>>>

===== RESTART: D:/DAA/kth pair XY plane.py =====

[[0, 1], [-2, 2]]

>>>

Ln: 9 Col: 0

Ln: 5 Col: 35

```

compute tuple.py - D:/DAA/compute tuple.py (3.12.4)
File Edit Format Run Options Window Help
class Solution(object):
    def fourSumCount(self, A, B, C, D):
        sums = {}
        for i in A:
            for j in B:
                if i+j not in sums:
                    sums[i+j] = 1
                else:
                    sums[i+j] += 1
        counter = 0
        for i in C:
            for j in D:
                if -1 * (i+j) in sums:
                    #print(-1 * (i+j))
                    counter+=sums[-1*(i+j)]
        return counter
obl = Solution()
print(obl.fourSumCount([1, 2], [-2, -1], [-1, 2], [0, 2]))

```

```

IDLE Shell 3.12.4
File Edit Shell Debug Options Window Help
Python 3.12.4 (tags/v3.12.4:0e0a4ba, Jun  6 2024, 19:30:16) [MSC v.1940 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> = RESTART: D:/DAA/kth pair XY plane.py
>>> [[3, 3], [-2, 4]]
>>>
>>> ===== RESTART: D:/DAA/kth pair XY plane.py =====
>>> [[0, 1], [-2, 2]]
>>>
>>> ===== RESTART: D:/DAA/compute tuple.py =====
>>> Traceback (most recent call last):
>>>   File "D:/DAA/compute tuple.py", line 1, in <module>
>>>     class Solution:
>>>   File "D:/DAA/compute tuple.py", line 2, in Solution
>>>     def fourSumCount(self, A: List[int], B: List[int], C: List[int], D: List[int]) -> int:
>>> NameError: name 'List' is not defined. Did you mean: 'list'?
>>>
>>> ===== RESTART: D:/DAA/compute tuple.py =====
>>> 2
>>>
>>> ===== RESTART: D:/DAA/compute tuple.py =====
>>> 1
>>>
>>> ===== RESTART: D:/DAA/compute tuple.py =====
>>> 2
>>> |

```

```
    else:
        medOfMed = kthSmallest(median, 0, i - 1, i // 2)

    pos = partition(arr, l, r, medOfMed)

    if pos - 1 == k - 1:
        return arr[pos]
    if pos - 1 > k - 1:
        return kthSmallest(arr, l, pos - 1, k)

    return kthSmallest(arr, pos + 1, r, k - pos + 1 - 1)

return 999999999999

def swap(arr, a, b):
    temp = arr[a]
    arr[a] = arr[b]
    arr[b] = temp

def partition(arr, l, r, x):
    for i in range(l, r):
        if arr[i] == x:
            swap(arr, r, i)
            break

    x = arr[r]
    i = l
    for j in range(l, r):
        if arr[j] <= x:
            swap(arr, i, j)
            i += 1
    swap(arr, i, r)
    return i

def findMedian(arr, l, n):
    lis = []
    for i in range(l, l + n):
        lis.append(arr[i])
    lis.sort()
    return lis[n // 2]

if __name__ == '__main__':
    arr = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
    n = len(arr)
    k = 6
    print("K'th smallest element is", kthSmallest(arr, 0, n - 1, k))
```

```
Python 3.12.4 (tags/v3.12.4:8e8a4ba, Jun 6 2024, 15:30:16) [MSC v.1940 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>
===== RESTART: D:/DAA/kth smallest element.py =====
K'th smallest element is 5
>>>
===== RESTART: D:/DAA/kth smallest element.py =====
K'th smallest element is 6
>>>
```

Ln 9 Col 0

Ln 61 Col 9