

평면상에 points 목록이 있을 때, 원점 (0, 0)에서 K번 가까운점 목록을 순서대로 출력하라. 평면상 두 점의 거리는 유클리드 거리로 한다.

Input: points = [[1,3],[-2,2]], k = 1

Output: [[-2,2]]

```
1.heapq
import heapq
```

```
class Solution:
```

```
    def kClosest(self, points: List[List[int]], k: int) -> List[List[int]]:
```

```
        def calculate(point):
```

```
            return [point[0]**2 + point[1]**2, point]
```

```
        result = heapq.nsmallest(k, [calculate(p) for p in points])
```

```
        return [r[1] for r in result]
```

```
import heapq
```

```
class Solution:
```

```
    def kClosest(self, points: List[List[int]], K: int) -> List[List[int]]:
```

```
        heap = []
```

```
        for (x, y) in points:
```

```
            dist = x ** 2 + y ** 2
```

```
            heapq.heappush(heap, (dist, x, y))
```

```
        result = []
```

```
        for _ in range(K):
```

```
            (dist, x, y) = heapq.heappop(heap)
```

```
            result.append((x, y))
```

```
        return result
```