Given an array of points and k, give k closest point to origin.

Use Euclidean distance → $\sqrt{(a_1-b_1)^2+(a_2-b_2)^2}$ (a,b)

Distance to origin $(a,0) \rightarrow \sqrt{(x-0)^2+(y-0)^2}$

$\Rightarrow \sqrt{x^2+y^2}$

traverse the array

calculate ED for each

add to array

Sort the array

return array[0:(k-1)]

---

next code minheap

[10, 1, 3], [8, -2, 2]

heapify pop from heap k log n

minheap → O(n)