Process of Interviews

1st Round → DSA coding Round + MCQ's (500 Students)

(Amazon, Google, facebook) (2 Problems) (Easy - Moderate)

Data Science → Dataframe

↳ fractal ↳ Train model

(Tier 2 or Tier 3) > 80% ↳ Submit { ↳ classification, Regression

2nd Round → DSA (Technical Aspects)

(45 mins) ↳ fundamentals → **courses**

Interview Questions

85-90 %

↳ Easy → Medium → Hard

↳ leetcode

↳ Easy + Medium

System Design

End to End Pipeline

3rd Round → { DSA Questions + Basics Data Science

Industry Projects

4th Round → Projects → fundamentals

→ Real time Projects

5th Round → Behavioral Round (4-6)

6th Round → HR Round

1) Google → Easy →
$(x_1, y_1) = (1, 6)$ — P_1
$(x_2, y_2) = (1, 0)$ — P_2
$(x_3, y_3) = (1, 9)$ — P_3

Collinear or not ??

slope

Exception

Approach - 1

$$\left\{ \frac{y_2 - y_1}{x_2 - x_1} = \frac{y_3 - y_2}{x_3 - x_2} \right\}$$

condition

$$(y_2 - y_1) * (x_3 - x_2) = (x_2 - x_1) * (y_3 - y_2)$$

LHS RHS

Approach-2 → area of Δ

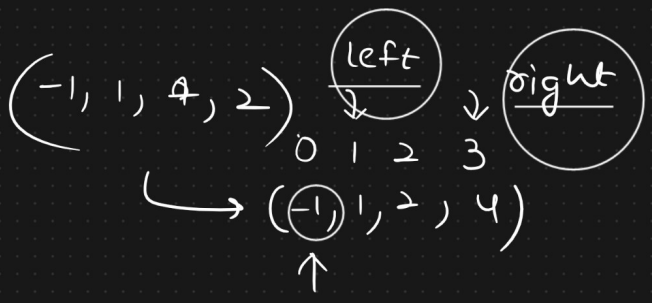
collinear → area of triangle = 0

$$\text{area} = \frac{1}{2}\left(x_1 * (y_2 - y_3) + x_2 * (y_3 - y_1) + x_3 * (y_1 - y_2)\right)$$

```
if area == 0:
    Print ('Yes')
else:
    Print ('No')
```

2) Amazon

featured Products



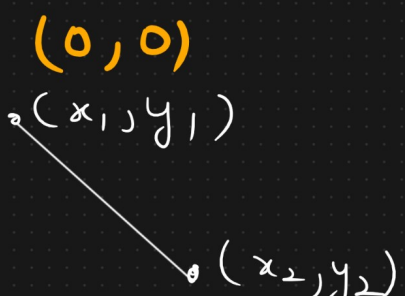
K - closest Points

↳ Minheap ← 1) (x,y) (Points, Distance from origin)

Points

result = [ ]

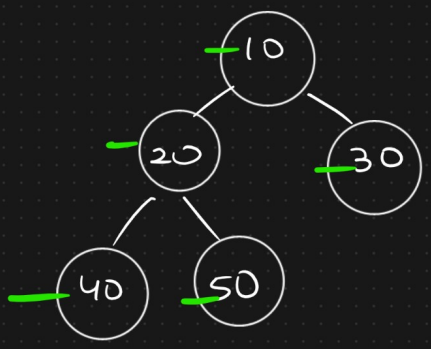
2) Pop k-times



Euclidean's Distance

$$\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$\Rightarrow \sqrt{x_2^2 + y_2^2}$$



Maxheap

k-th element

⇓

{ Maxheap & Minheap

- Personal Branding
  - ↳ Binary vs Ternary Search
  - ↳ Notes