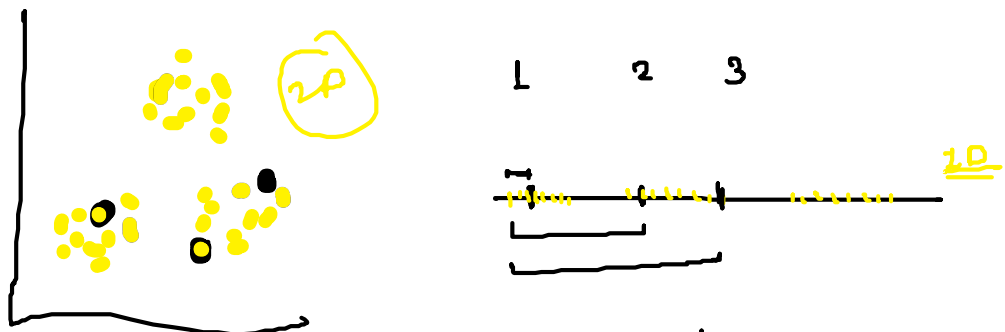


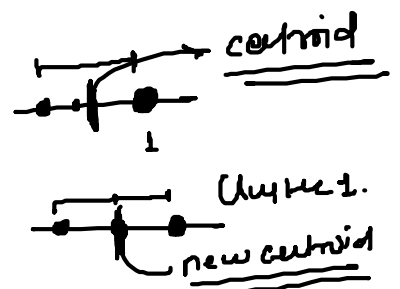
k-means: $k = \underline{\text{no. of clusters}}$

Centroid:

Step 1: select a k value: 3



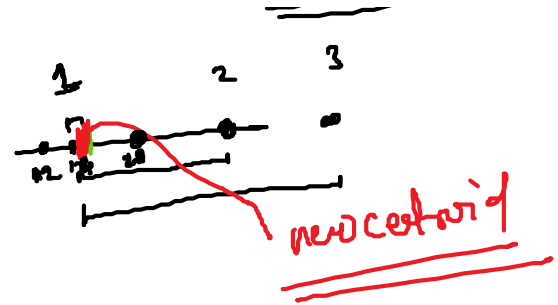
- ② Randomly select 3 datapoints
- ③ measure the distance between the 1st dp & clusters
- ④ Assign pt 1 to nearest cluster (1)
- ⑤ calculate the mean value of cluster 1 including new pt.



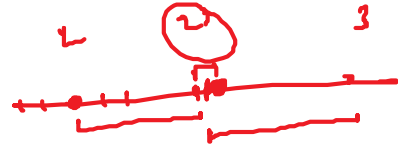
end at.

1 2 3

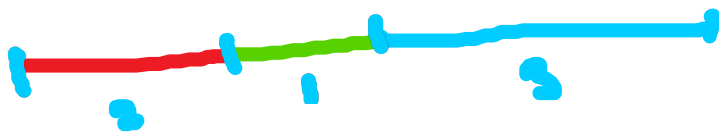
and pt.



point 6



red green blue
1 2 3



iteration 2-



iteration 1-3

random centroids = 3



3

lowest sum of variation

↓
Best cluster.

20 17 lowest sum of variation

How to decide value of k

k=1 →

k=2

k=2 < k=1

k=3

k=3 < k=2

k=4 < k=3

— Variation in k is higher

h. 5.

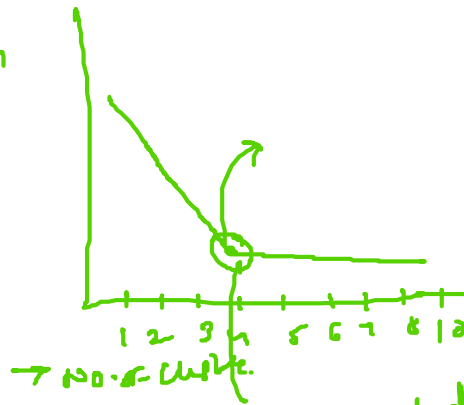
12 11 10 9 8

$k \in \mathbb{N}$

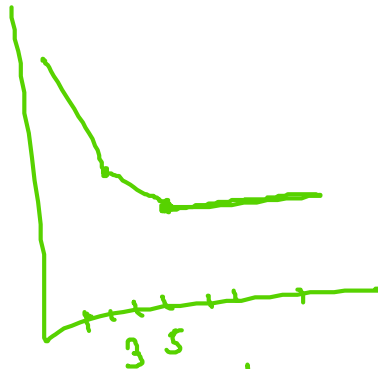
kg

Variation in k_1 is higher
than k_2

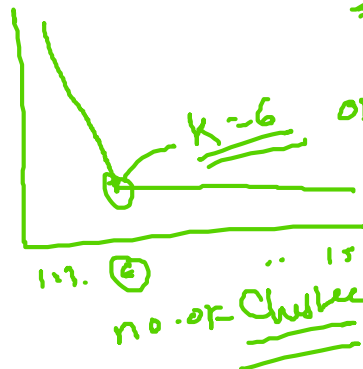
$n = k \rightarrow$ variation



optimum no. of clusters



WCSS
within cluster sum of squares



15
optimal no. of clusters

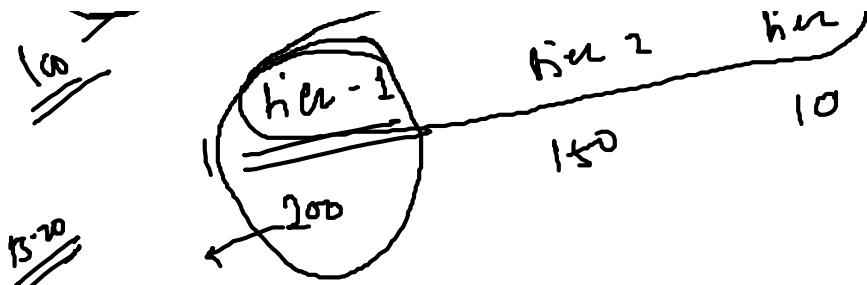
15.22

Handwritten diagram showing a hierarchy of nodes:

- Circle labeled 226 (with 100 below it)
- Circle labeled National (with 2000 below it)
- Circle labeled 100-1 (below 226)
- Circle labeled 100 (below National)

Arrows indicate connections:

- From 226 to 100-1
- From 100-1 to 100
- From 100 to National



$$80 \frac{4}{3-10}$$

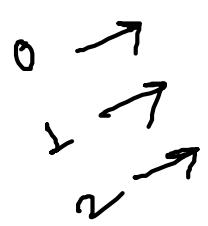
$$300 \frac{1.5}{3}$$

$$\frac{1200}{1.2}$$

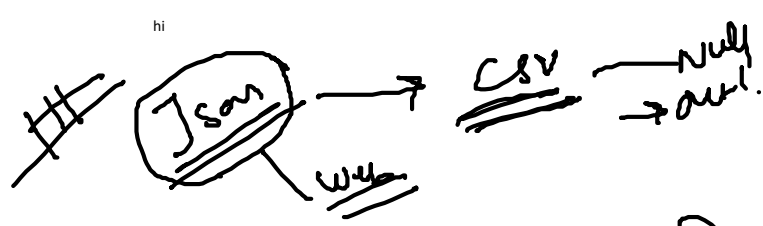
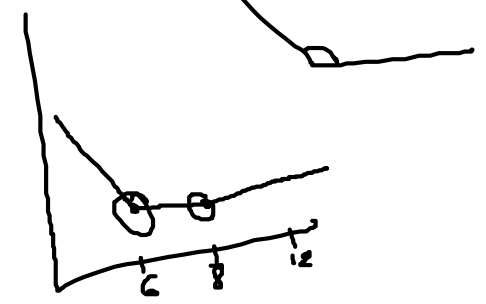
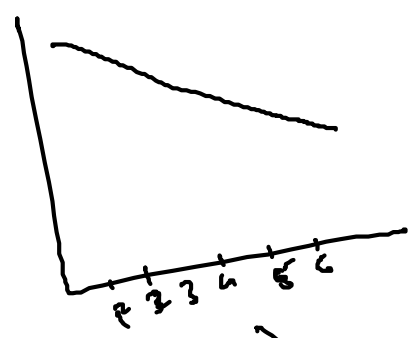
4

$$\frac{8-10-12}{2}$$

0, 1, 2.



1, 2, 3, 4.



$$CSV \frac{1000}{200}$$

$$CSV = \frac{200}{1000}$$

Active =

Ison: (df)
L2c: (df)

using

Data Gathering

Current CTC = Cost to Company

5.8 LPA

Monthly - 48330 → In hand

2000 } deducting
2000 } 20 Professional fee

In hand $48330 - 3000 = \underline{45330}$ k

Variables

Find variable



Variable

Extraneous give
to fit
and Lacks JB

hi

Expected salary = $\frac{\text{ci value}}{\text{range}} \times$

f.o	0.21	<u>7</u>
<u>5 LPA</u>	20 - 5.5	<u>5 to 8 LPA</u>
	40 7	<u>6 7</u>

<u>5 LPA</u>	20 x. }	<u>20%</u>	5.5 - <u>6.6</u>
	40 . }		<u>51.5.7</u>

2.1.

What is the base

10.1.

what are you offering
how much (more negative)

$$5.5 \text{ lpa} = \underline{\underline{11 \text{ lpa}}}$$

HLL LT1

$$OS = 12 \text{ lpa}$$

10

10

$$6 \frac{8 \times 12}{10 \times 4}$$

$$\frac{2}{8 \times 10}$$

hi

$$3 \rightarrow 5.8$$

$$30 \text{ to } 40$$

$$7.25 + 7.75$$

$$7 \text{ to } 8$$

$$28 \quad 43$$

$$7.5 \quad \frac{7.5}{7.5} \quad 7.5$$

#

need to accept 2 days

Hi Graham,

I met. you

15

\$19 graduate

#

Do you have any questions?

↓
1

}

hi