(23)

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—— Begin here ——

Sol 1>

Q 1> True ✓
2> True ✓
3> True ✓
4> True ✓
5> False ✓
6> False ✓
7> True ✓

(7)

Q 8> we will need,

$$\frac{512GB}{8KB} \text{ blocks to store}$$

$$= \frac{2^9 \times 2^{20}}{8} KB \quad \ldots \quad (2)$$

$$= 2^6 \times 2^{20} \text{ "} \quad \ldots$$

Now so, we need $2^6 \times 2^{20}$ bit to store

$$= 2^3 \times 2^{20} \text{ byte} \quad \ldots$$

$$= 8MB$$

Q(9) Amdahl's law

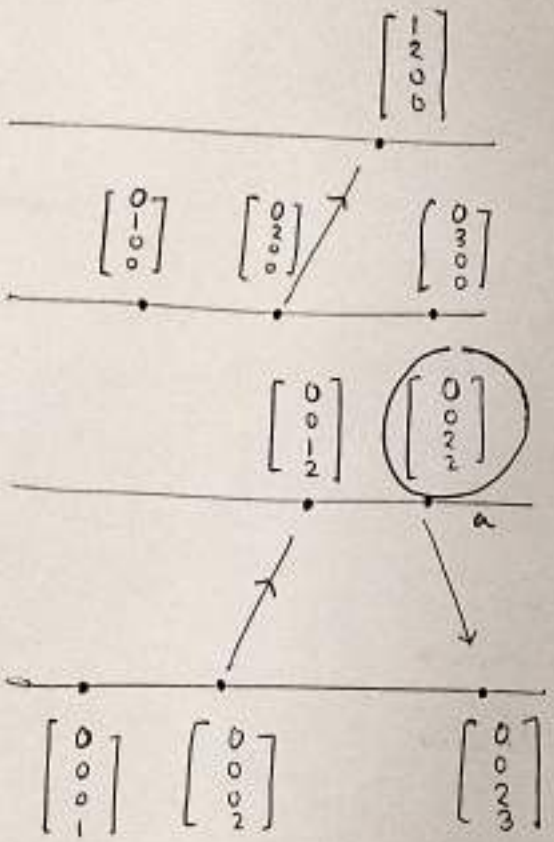
best achievable speedup = $\frac{1}{\frac{75}{100} + \frac{25}{100}\cdot\frac{1}{4}}$ ← can be parallelized

↑ can't be parallelized

$= \frac{100}{75 + 6.25}$ (2)

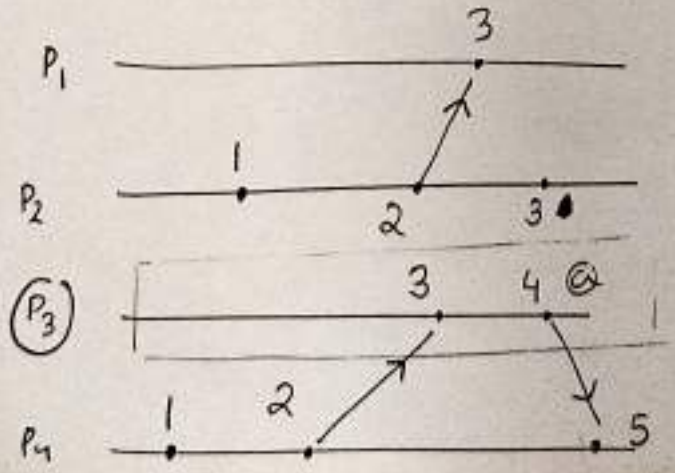
$= \frac{100}{81.25}$

Q(10)




(2)

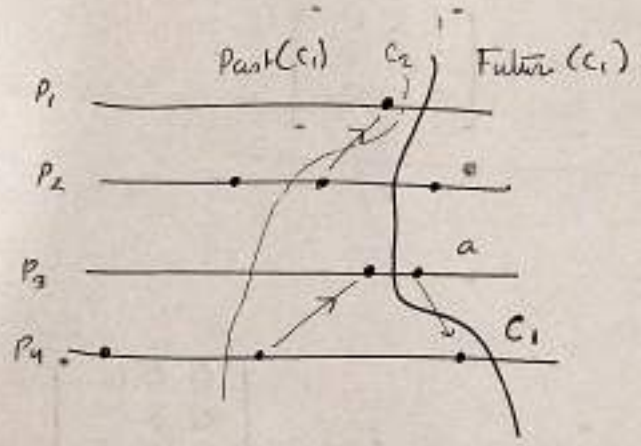
Q.(11)




(2)

Q.(11)

Q(12)




(2)

Here $C_1$ is an inconsistent cut

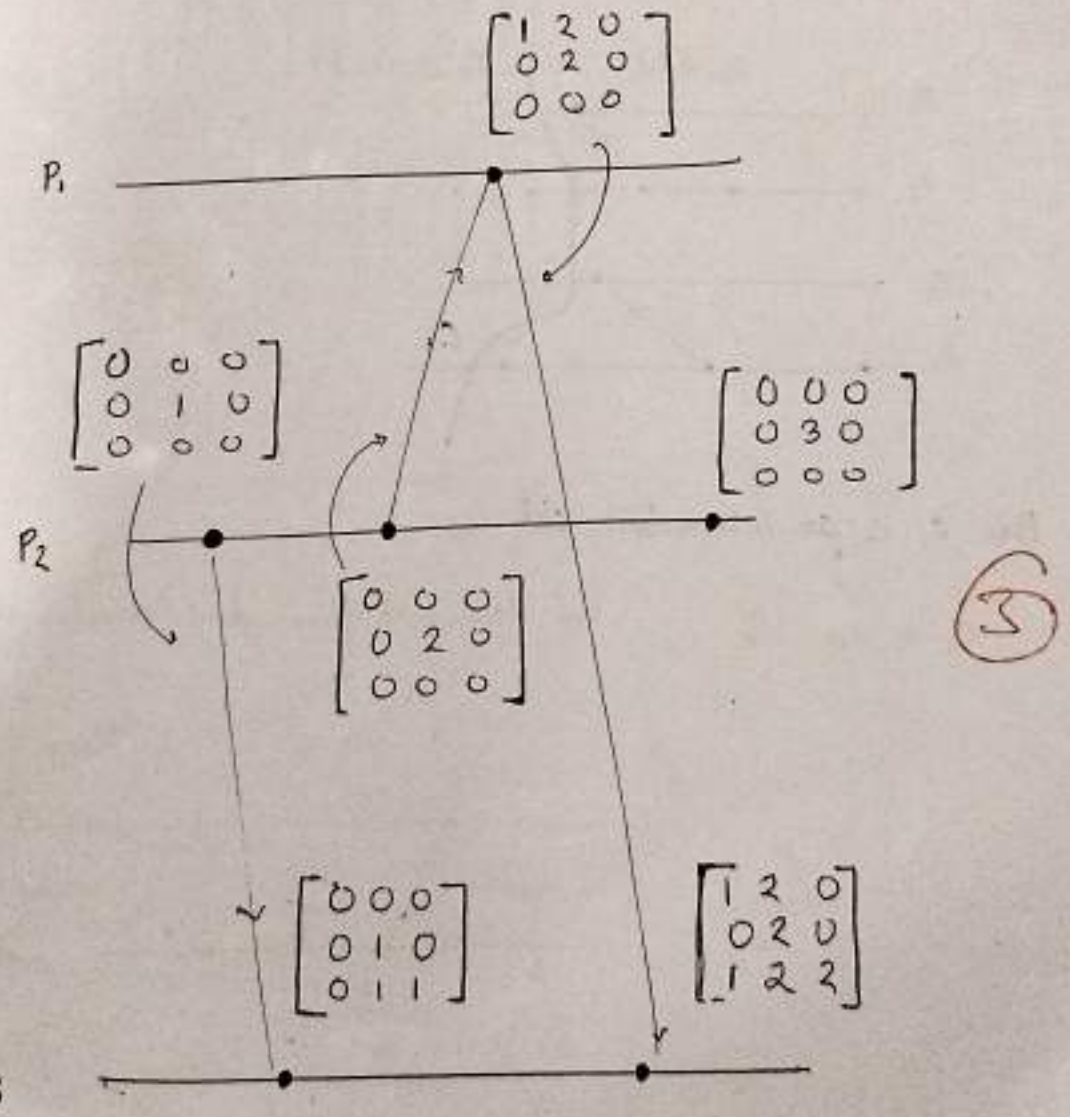
$C_2$ is an " " two. both often don't involve a

Q(13)

Round 1: don't know, don't know, don't know, don't know.

Round 2: don't know, don't know, don't know, don't know.

Q.(14)



Q. (15) We will (may) do the following approach.

1) first, divide the large text into smaller chunks of texts

2) use Map programme on each of them to get the words without vowels from each chunk parallely

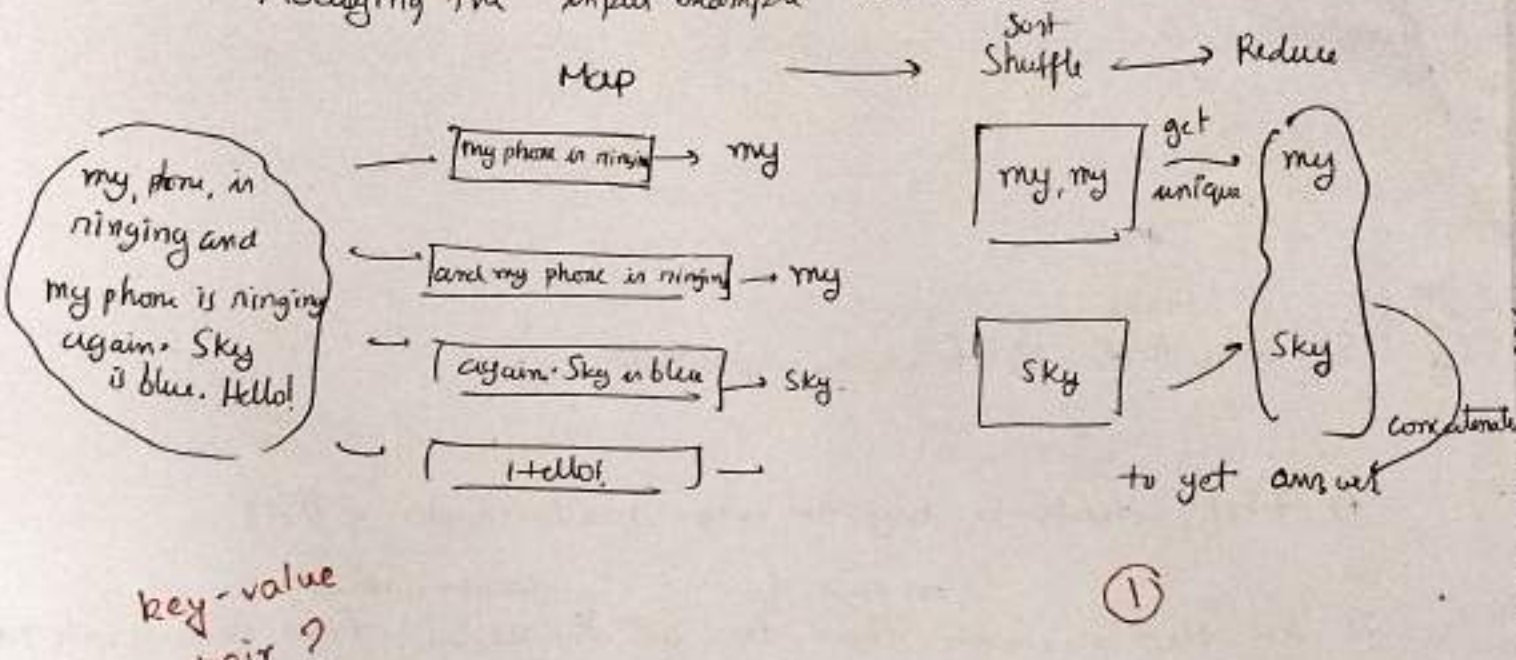
(this process can be done by iterating over each word and then check if there is vowel or not)

3) once a mapper is finished processing, sort and shuffle them then to send the each (such word) to reducer nodes at all the instances of same word reach the same reducer node

4) reducer nodes then (checks) goes through all the words and return the unique list of word and to get the result they will be combined.

Example:

Modifying the input example to illustrate better.




key-value pair ?

(1)

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