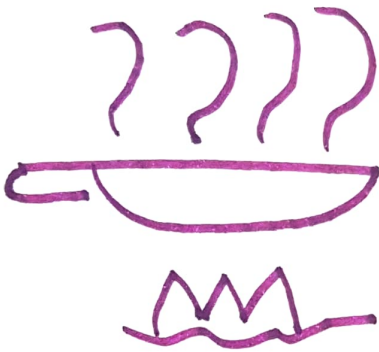


GOAL



Existing
Recipe

RECIPE SIZE
= 7

FREQ: RARE ING.

= 4 : 3



Generated
Recipe

RECIPE SIZE
= 7

FREQ: RARE ING.

= 4 : 3

Same

1) For each ingredient, find count of recipes containing it.

INGREDIENT	COUNT
salt	45206
onion	34544
yellow pea	99
dhaniya powder	6

2) Finding the average recipe count for an ingredient.

$$\begin{aligned}\text{AVG RECIPE COUNT} &= \frac{\text{Sum (COUNT)}}{\text{NO. OF INGREDIENTS}} \\ &= \underline{56.85}\end{aligned}$$

(3) Making an assumption that,

Ingredient with recipe count $> 57 \rightarrow$ Frequent Ingredient

Ingredient with recipe count $\leq 57 \rightarrow$ Rarely occurring ingredients

salt $\rightarrow 45206 > 57$	\rightarrow Freq.
onion $\rightarrow 34544 > 57$	\rightarrow Freq.
yellow pea $\rightarrow 99 > 57$	\rightarrow Freq.
dhaniya powder $\rightarrow 6 < 57$	\rightarrow Rare

- 4) For each recipe, find the ingredients contained in it and the recipe size.

RECIPE NO.	INGREDIENTS	RECIPE SIZE
18206	[water]	1
118511	[brown sugar, strawberry]	2
62146	[white onion, sugar, rice vinegar]	3
63427	[flour, egg, water]	3

- 5) For each recipe, find the ratio of frequently to rarely occurring ingredients.

RECIPE NO.	INGREDIENTS	RECIPE SIZE	FREQ	RARE
18206	[water]	1	1	0
118511	[brown sugar, strawberry]	2	2	0
62146	[white onion, sugar, rice vinegar]	3	3	0
63427	[flour, egg, water]	3	3	0

- 6) For each recipe size, find the most freq. occurring FREQ: RARE INGREDIENTS RATIO.

RECIPE SIZE	FREQ	RARE
1	1	0
2	2	0
3	3	0
4	4	0
5	5	0
6	6	0
7	7	0
8	8	0
9	9	0

10	10	0
11	11	0
12	12	0
13	13	0
14	14	0
15	15	0
16	16	0
17	17	0
18	18	0
19	19	0
20	20	0

21	21	0
22	21	1
23	23	0
24	23	1
25	24	1
26	25	1
27	27	0
28	27	1
29	29	0
30	25	5
31	29	2
32	26	6
33	32	1
34	28	6
35	32	3
36	32	4
37	36	1
38	36	2

7) Generate a random no. from 1 to 8.

Say, no. generated = 6

Now, for recipe size = 6, look up the table for its FREQ: RARE INGREDIENTS RATIO.

Then select ingredients into the new recipe in the same ratio.

21	21	0
22	21	1
23	23	0
24	23	1
25	24	1
26	25	1
27	27	0
28	27	1
29	29	0
30	25	5
31	29	2
32	26	6
33	32	1
34	28	6
35	32	3
36	32	4
37	36	1
38	36	2

7) Generate a random no. from 1 to 8.

Say, no. generated = 6

Now, for recipe size = 6, look up the table for its FREQ: RARE INGREDIENTS RATIO. Then select ingredients into the new recipe in the same ratio.