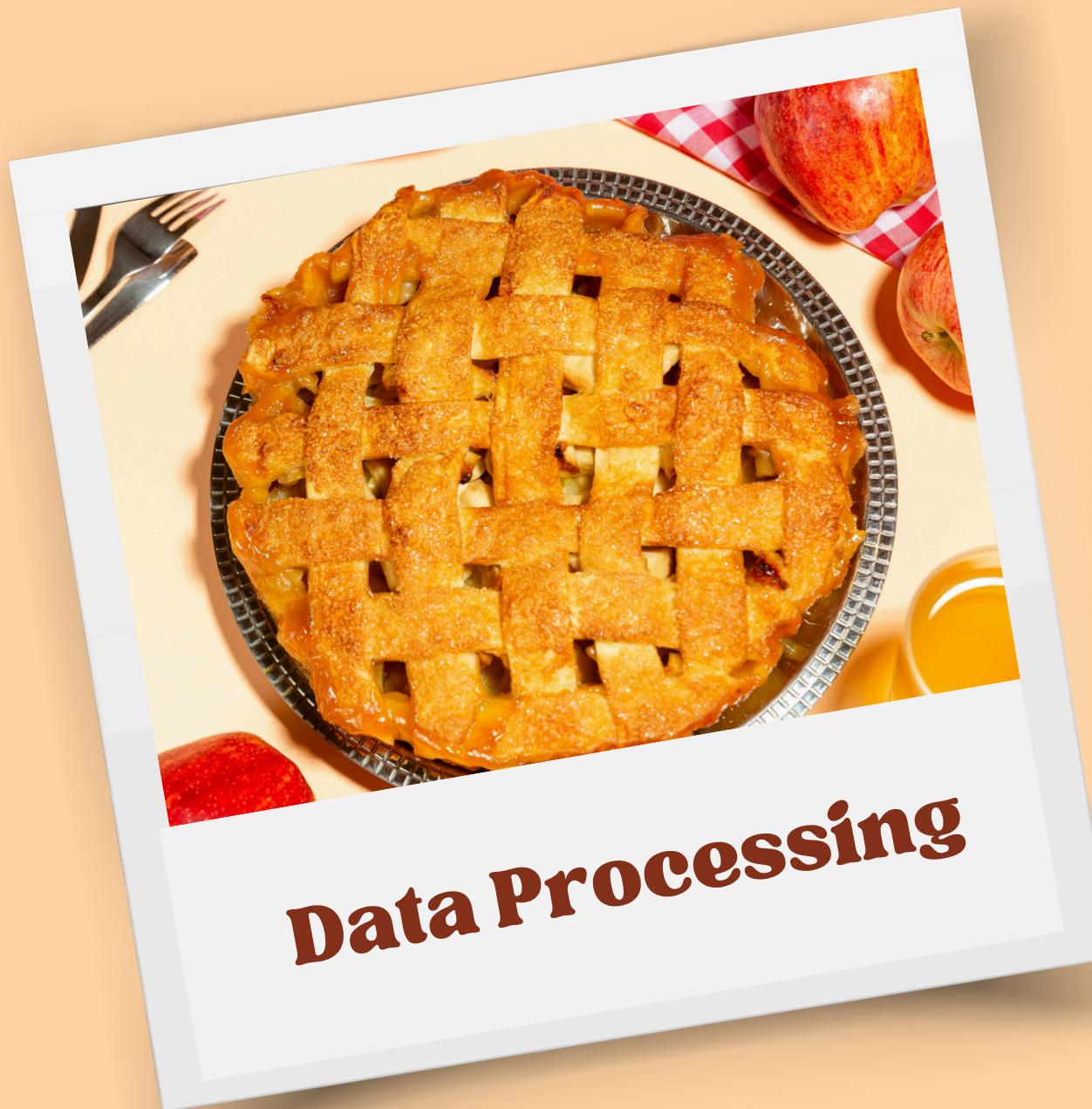




NOM NOM



# TOPIC OUTLINE



Data Processing



Modelling &  
Analysis



Final Results

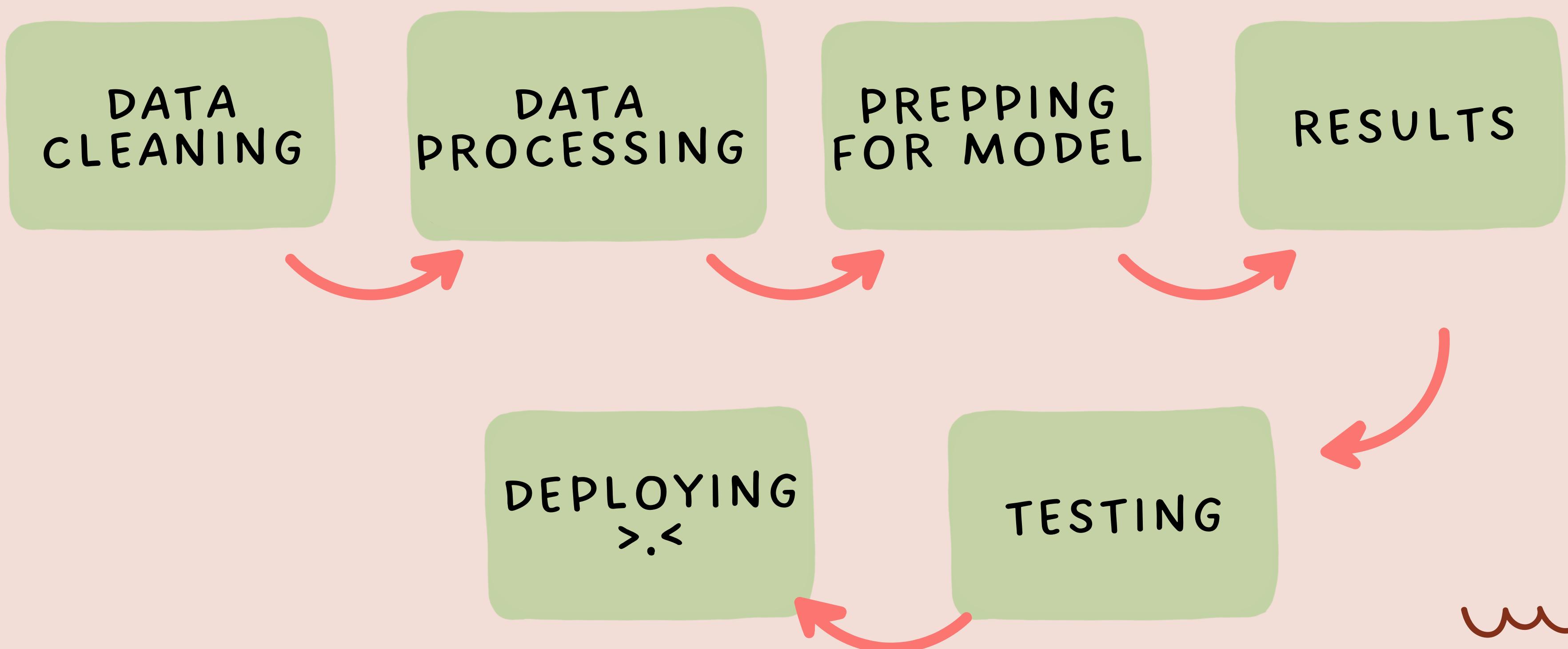
# DATA OVERVIEW

- TITLE
- INGREDIENTS
- INSTRUCTIONS
- PICTURE\_LINK

125,000 RECIPES IN TOTAL



# OUR PROCESS



# OUR PROCESS

## DATA CLEANING

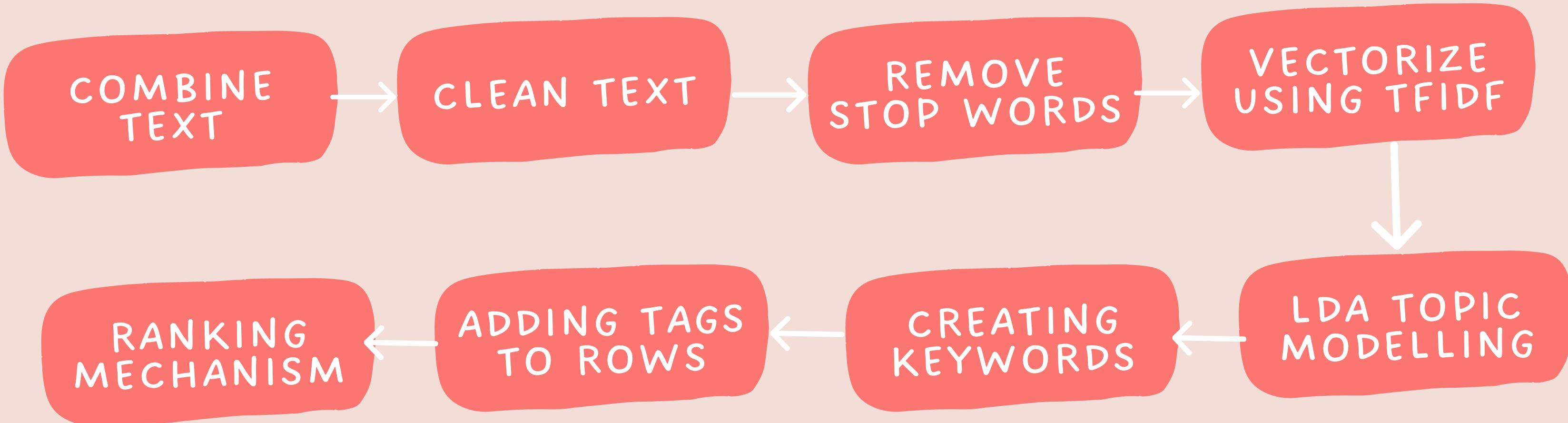
- DROPPING ROWS WITH EMPTY INGREDIENTS, INSTRUCTIONS,
- DROPPING RECIPES <30 CHARACTERS IN RECIPES
- DROPPING RECIPES <20 CHARACTERS INGREDIENTS
- REMOVING REPEATING WORDS AND PUNCTUATIONS AND REMOVING STOP WORDS

## DATA PROCESSING

FOR NEW VARIABLES WE ALSO ADDED THE FOLLOWING VARS USING LLMS

- COOKING TIME
- VEG/NON-VEG
- CUISINE TYPE
- INGREDIENT LENGTH
- IMAGES

# MODELLING PROCESS

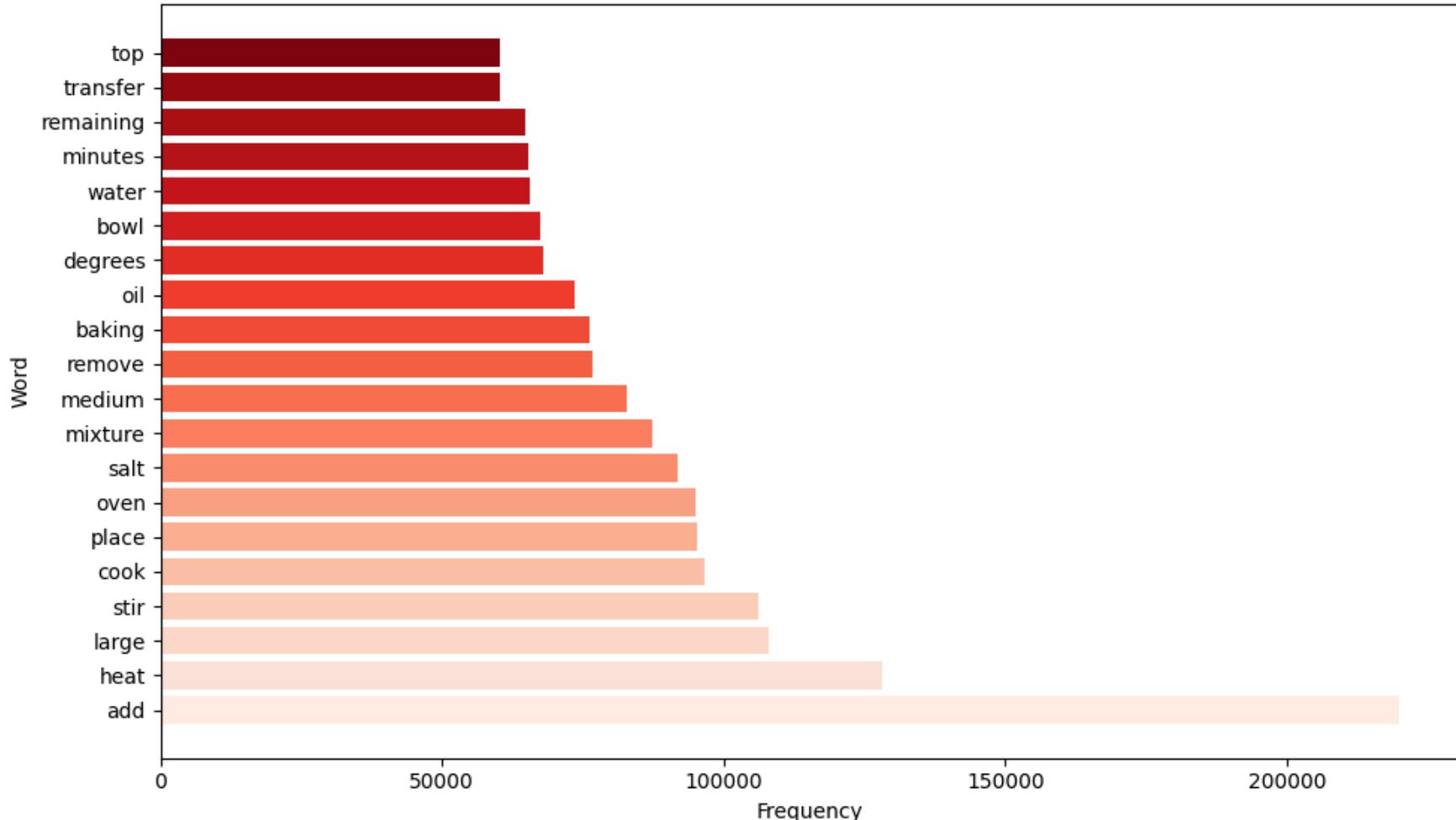


```
w_title = 0.4  
w_text = 0.4  
w_categories = 0.2  
w_array = np.array([w_title, w_text, w_categories])
```

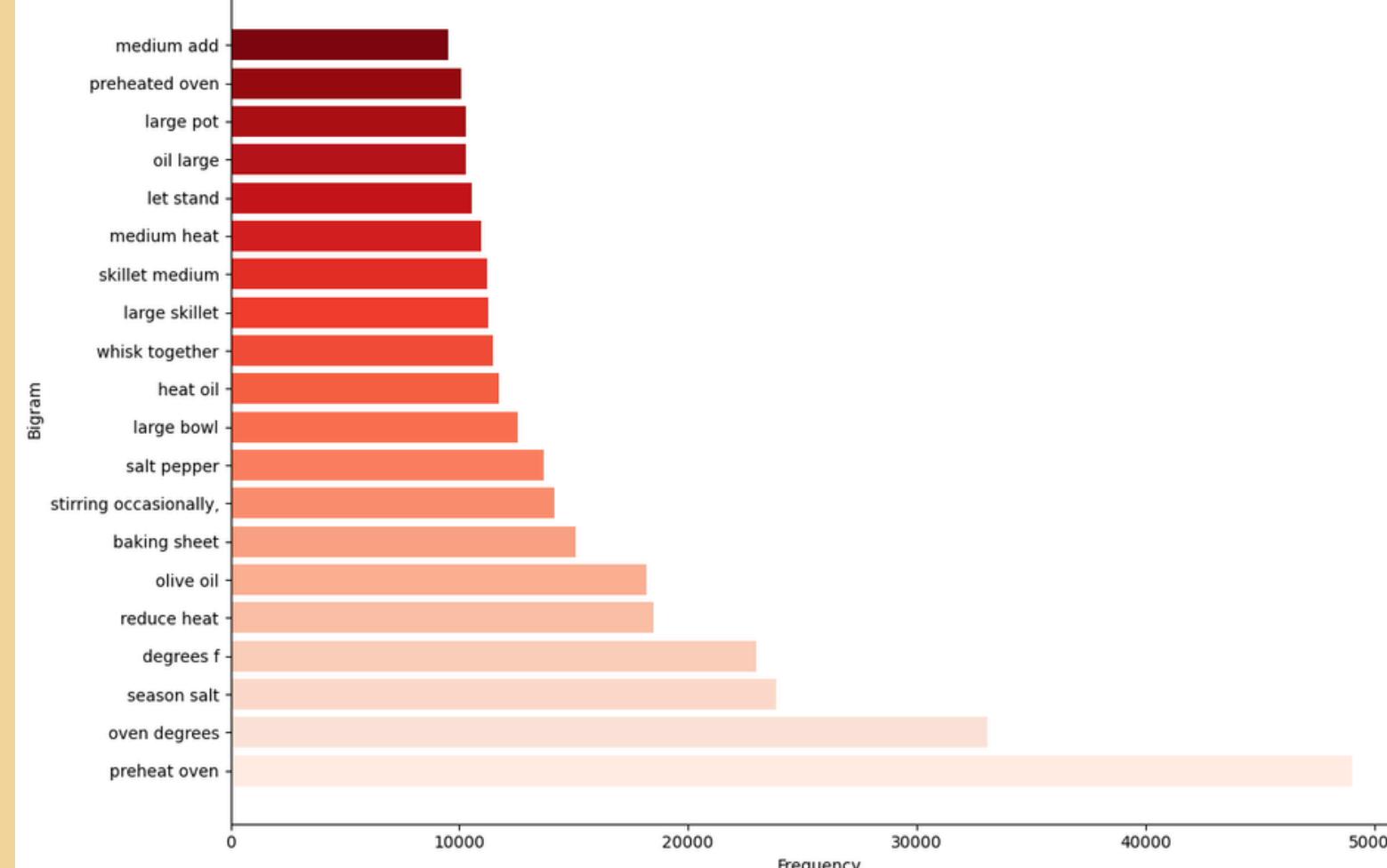
SOME GRAPHS ALONG THE WAY



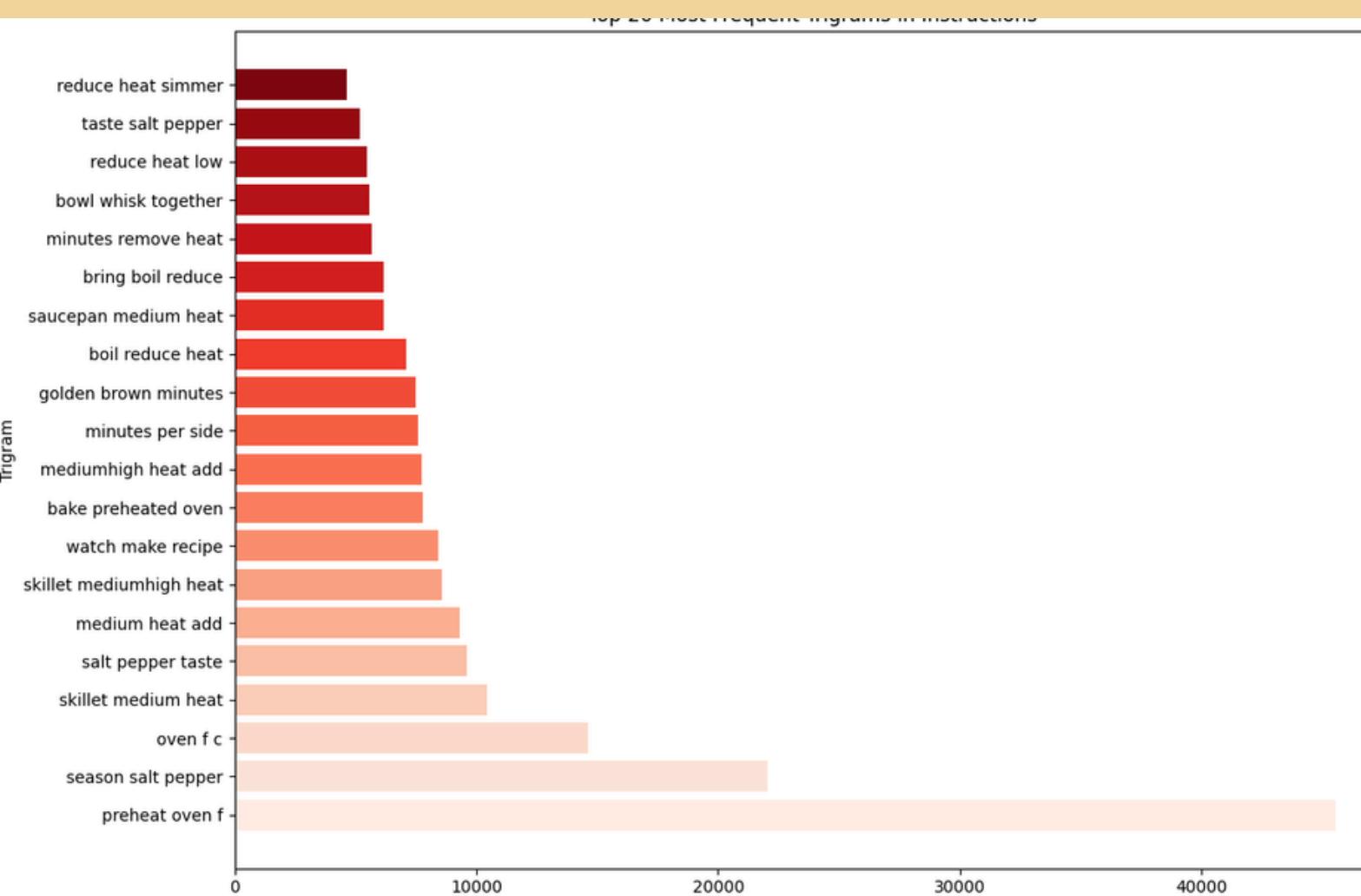
Top 20 Most Frequent Words in Instructions

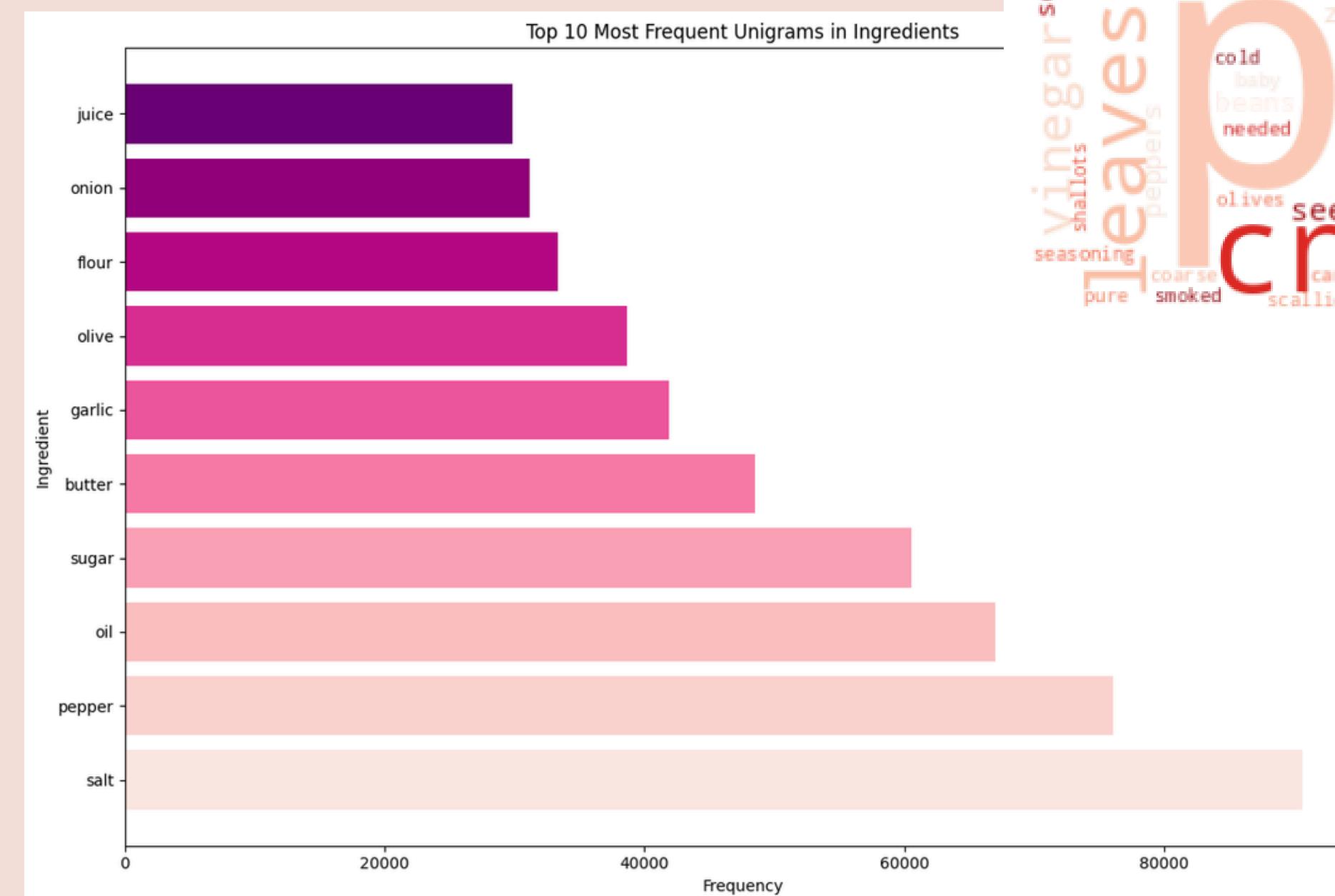


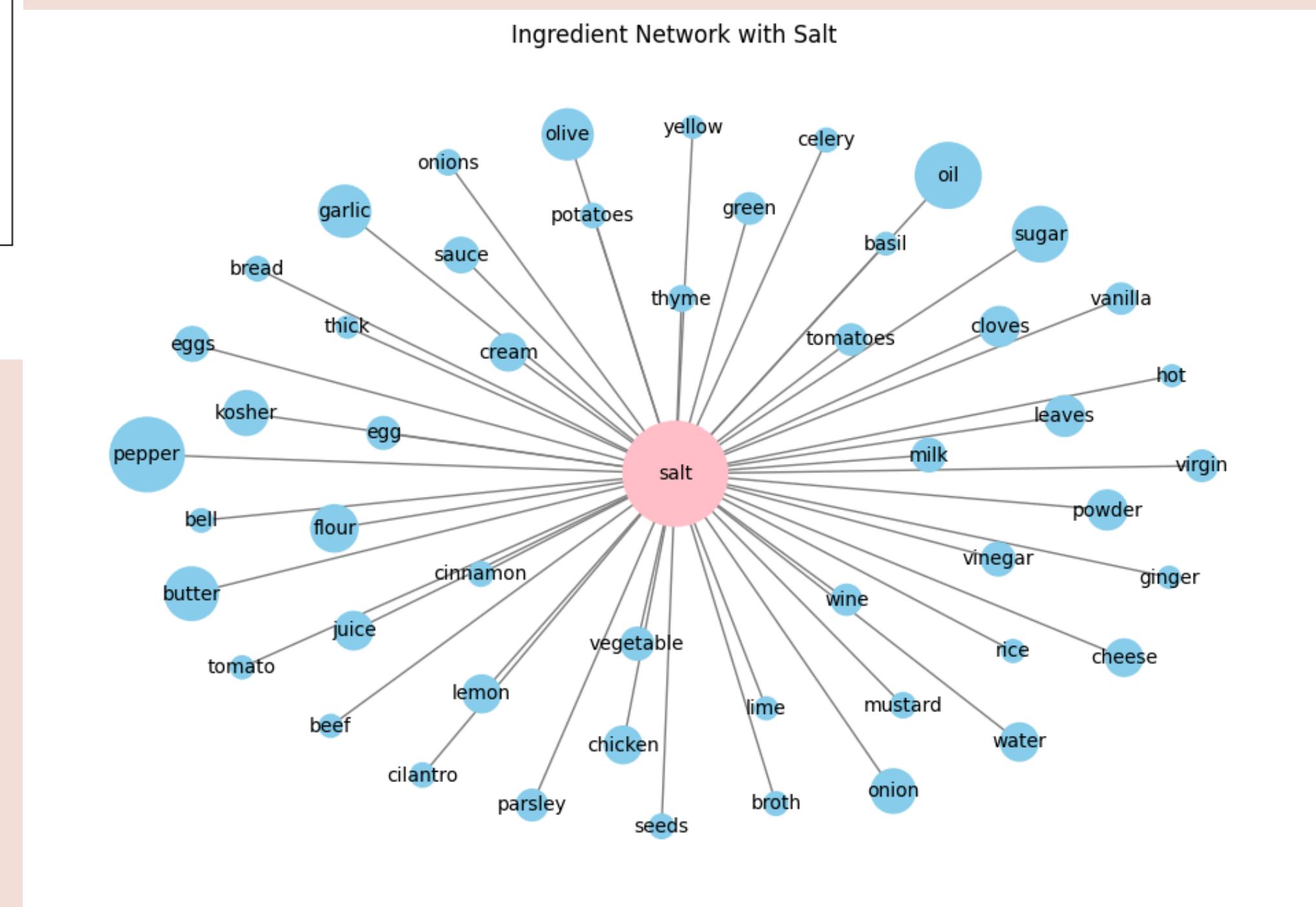
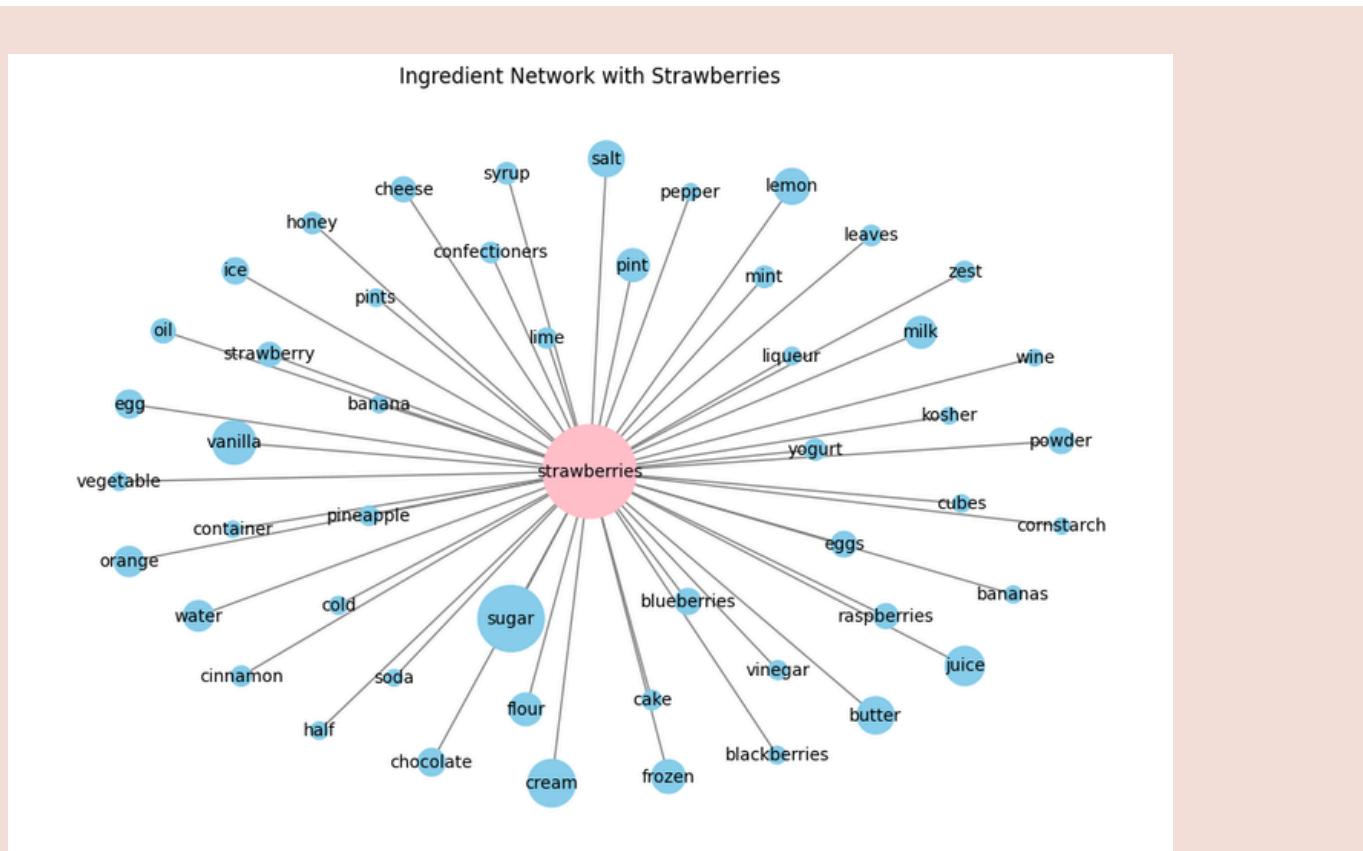
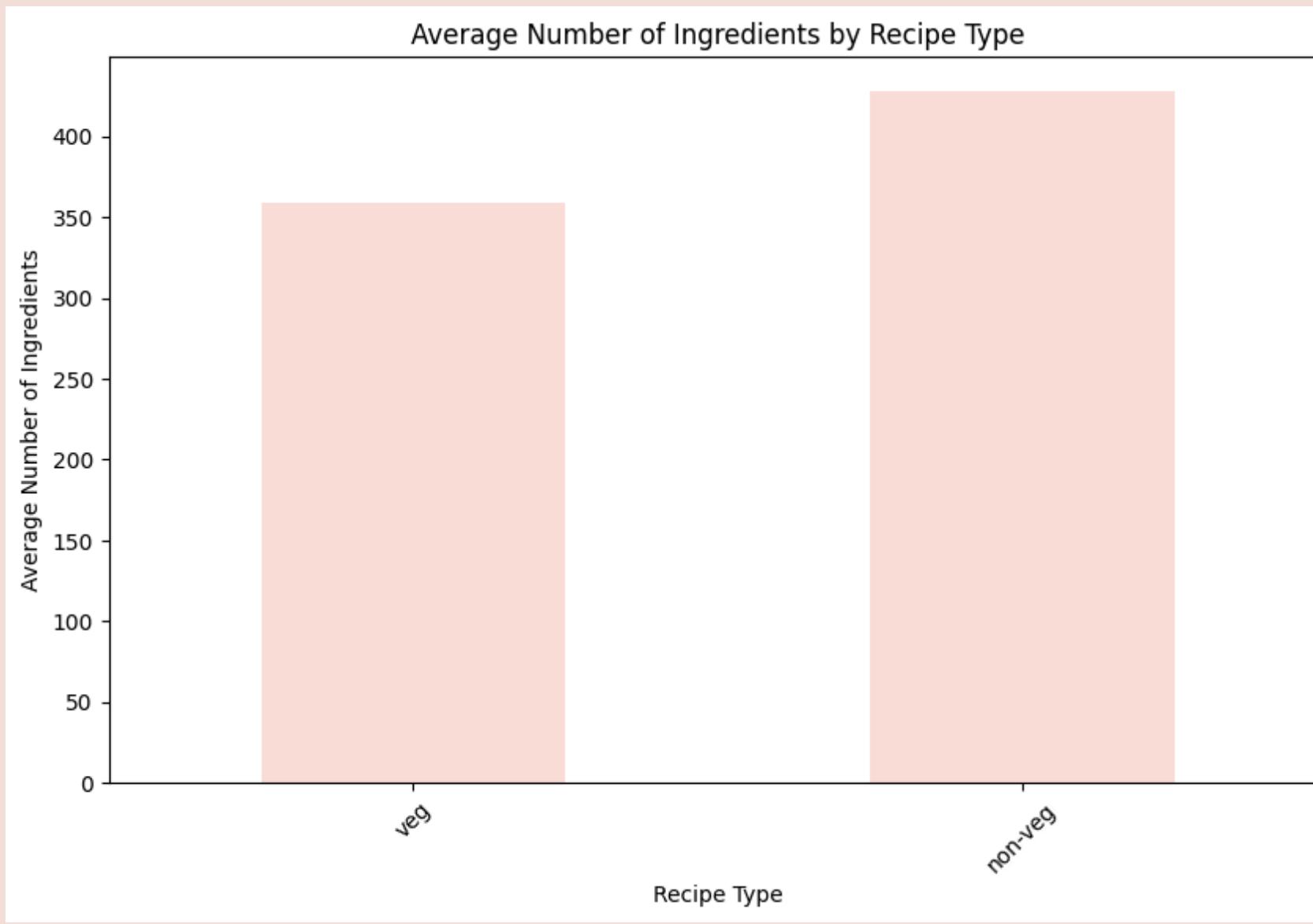
Top 20 Most Frequent Bigrams in Instructions



Top 20 Most Frequent Trigrams in Instructions







# WHAT HAPPENS AFTER INPUT?





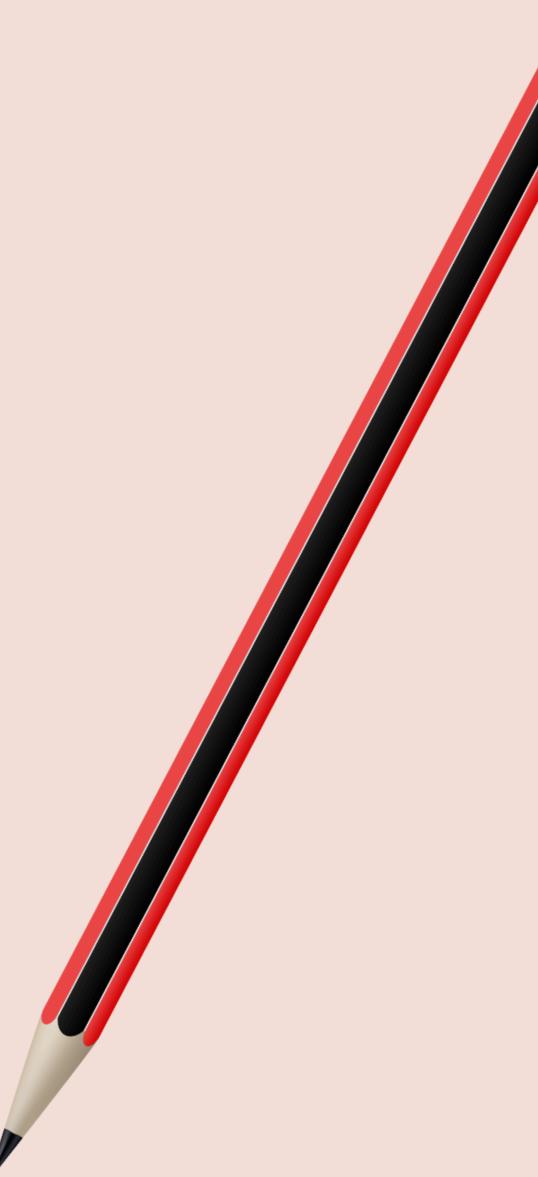
INPUT

TEXT  
CLEANING &  
VECTORIZING

COSINE  
SIMILARITY

RANKING

RESULTS



# ['CINNAMON', 'CREAM', 'BANANA']

RANK 1

## Cinnamon Cream

TYPE: VEG

INGREDIENT COUNT: 5

INGREDIENTS:

['1/2 PACKAGE EXTRA-FINE SILKEN TOFU',  
'1 TEASPOON ALMOND OIL', '1/4 CUP PURE  
MAPLE SYRUP', '2 TABLESPOONS SPLENDA',  
'1 TEASPOON CINNAMON']

INSTRUCTIONS:

COMBINE ALL INGREDIENTS IN A BLENDER  
AND PROCESS AT HIGH SPEED UNTIL  
SMOOTH. CHILL IN THE REFRIGERATOR

FOR 1 HOUR.

COMBINE ALL INGREDIENTS IN A BLENDER  
AND PROCESS AT HIGH SPEED UNTIL  
SMOOTH. CHILL IN THE REFRIGERATOR  
FOR 1 HOUR.

RANK 2

## Banana Cinnamon Roll Casserole

TYPE: VEG

INGREDIENT COUNT: 7

INGREDIENTS:

['4 LARGE STALE CINNAMON ROLLS', '1 1/2 CUPS  
MILK', '5 EGGS', '2 TEASPOONS VANILLA EXTRACT',  
'2 TEASPOONS GROUND CINNAMON', '2 BANANAS',  
'DIVIDED', '1/2 CUP BROWN SUGAR']

INSTRUCTIONS:

SLICE CINNAMON ROLLS INTO 1-INCH SQUARES.  
WHISK MILK, EGGS, VANILLA EXTRACT, AND  
CINNAMON TOGETHER IN A BOWL.  
SLICE 1 BANANA AND LAYER ON BOTTOM OF A

RANK 3

## Cinnamon Sour Cream

TYPE: VEG

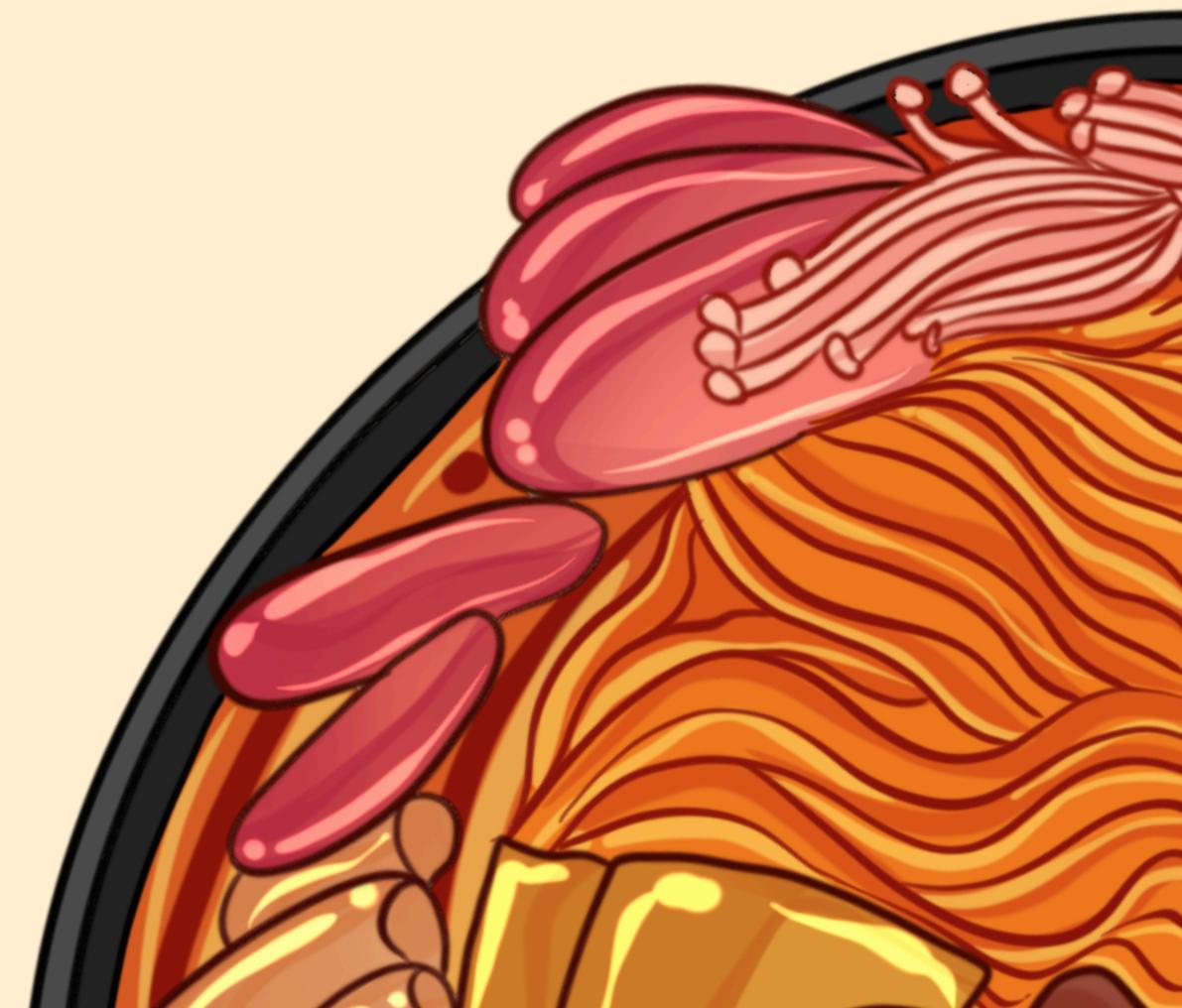
INGREDIENT COUNT: 3

INGREDIENTS:

['1 CUP SOUR CREAM (YOU CAN USE  
NONFAT)', '1 TABLESPOON PLUS 1  
TEASPOON BROWN SUGAR', '1 TEASPOON  
CINNAMON']

INSTRUCTIONS:

WORKING IN A SMALL BOWL AND USING A  
RUBBER SPATULA, THOROUGHLY COMBINE  
THE INGREDIENTS. STORE COVERED IN  
THE REFRIGERATOR UNTIL READY TO  
SERVE. THE CREAM WILL KEEP FOR ABOUT  
1 WEEK.



# DEMO...

Let's see NomNom in action



## Next Steps

1. ADD VARS LIKE CUISINE AND COOKING TIME INTO DATASET - KEPT CRASHING
2. WORK ON UI WITH DIFFERENT PARAMETERS + IMAGE GENERATION (WE HAD BUT COULDN'T IMPLEMENT)
3. ADD SCORES TO ELEMENTS IN TERMS OF THEIR APPEARANCE
4. TRY DIFFERENT TF-IDF MODELS FOR BETTER RESULTS

THANK YOU!

