## **Computational Gastronomy**

## Coding Assignment 3

You may use Python and Jupitor Notebook as an IDE for completing the assignments and documentation.

Note: You are responsible for the backup of data as well as results, which will be used for evaluation.

1.	For t	he	<u>data</u>	of	recipes	from	Kagg	<u>le</u> :

- (a) Apply the **apriori algorithm** to item sets and their support values. [5]
- (b) Find the top itemsets with best support for set size of 1, 2, 3, 4, and 5. [2]
- (c) What are your interpretations based on these observations. [5]

## 2. **Starting with the Kaggle data** implement the following:

- (a) Create a random control  $(R_0)$  to preserve the number of ingredients, the number of recipes, and the recipe size distribution. [5]
- (b) Create a random control  $(R_1)$  to preserve the frequency of use of ingredients (popularity) in addition the factors preserved in  $R_0$ .