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| Sample Data | **Speaker list is universal between methods**   1. **Use previous speaker to select row** 2. **Generate a random number** 3. **Use that to select column of next speaker** |

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| Method 1 Original |  |  |
| Process to create speaker tables using a sliding window method.  John    Mike    Sally     1. Create a random first row from the input data  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Sally | 1 | 0 | 0 | 0 | |  |  |  |  |  | |  |  |  |  |  |  1. Using previous row find new speaker (random gen number 0.261)  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Sally | 1 | 0 | 0 | 0 | | John |  |  |  |  | |  |  |  |  |  |  1. Using previous row find new code (random gen number 0.772)  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Sally | 1 | 0 | 0 | 0 | | John | 0 | 0 | 0 | 1 | |  |  |  |  |  |  1. Repeat process for next row (random gen numbers 0.182,0.615)  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Sally | 1 | 0 | 0 | 0 | | John | 0 | 0 | 0 | 1 | | John | 1 | 0 | 0 | 0 | | | |

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| Method 2 Naive |  |  |
| Process to create naïve speaking table uses a process to convert raw data into binary coded raw data which the same process as method 1 is applied to result in the following tables  John    Mike    Sally     1. Create a random first row from the input data  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Mike | 0 | 0 | 0 | 1 | |  |  |  |  |  | |  |  |  |  |  |  1. Using previous row find new speaker (random gen number 0.261)  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Mike | 0 | 0 | 0 | 1 | | Mike |  |  |  |  | |  |  |  |  |  |  1. Using previous row find new code (random gen number 0.772)  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Mike | 0 | 0 | 0 | 1 | | Mike | 1 | 1 | 0 | 0 | |  |  |  |  |  |  1. Repeat process for next row (random gen numbers 0.182,0.615)  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Mike | 0 | 0 | 0 | 1 | | Mike | 1 | 1 | 0 | 0 | | John |  |  |  |  |  1. John has no codes for 1100 – one solution is trying 1000 and 0100 2. 1000 is valid (random gen number 0.286)  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Mike | 0 | 0 | 0 | 1 | | Mike | 1 | 1 | 0 | 0 | | John | 0 | 0 | 0 | 1 | | | |

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| Method 3 Iterative |  |  |
| Number of codes used by each person    Process to create a series of tables for each speaker  John    Mike    Sally | | |

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| 1. Create a random first row from the input data  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Sally | 1 | 0 | 0 | 0 | |  |  |  |  |  | |  |  |  |  |  |  1. Run number of codes used by each person table 2. 3 run the process to add new codes for that line 3. Using previous row find new speaker (random gen number 0.826)  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Sally | 1 | 0 | 0 | 0 | | Sally |  |  |  |  | |  |  |  |  |  |  1. Calculate how many codes the new phrase should have (random gen number 0.721) = 2 codes 2. Using previous row find new code (random gen number 0.605)  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Sally | 1 | 0 | 0 | 0 | | Sally | 0 | 0 | 1 | 0 | |  |  |  |  |  |  1. Repeat process for next code in row (random gen number 0.142)  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Sally | 1 | 0 | 0 | 0 | | Sally | 1 | 0 | 1 | 0 | |  |  |  |  |  |  1. Using previous row find new speaker (random gen number 0.126)  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Sally | 1 | 0 | 0 | 0 | | Sally | 1 | 0 | 1 | 0 | | John |  |  |  |  |   (if we repeat the process again and it suggests a letter that was already in the generated data , skip its addition, even if the line does not end up with 3 more etc. codes)   1. Calculate how many codes the new phrase should have (random gen number 0.461) = 1 code 2. Using previous row find new code (random gen number 0.812) (since more than one in previous line pick one randomly (from A or C), in this case C)  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | A | B | C | Null | | Sally | 1 | 0 | 0 | 0 | | Sally | 1 | 0 | 1 | 0 | | John | 0 | 0 | 1 | 0 | |
|  |

Test.csv

Use that

Filter based on number of codes

1. Naïve method – calculate similarity

We can walk through this next week

1. Finish off iterative method