R1C3

**Objective:**

To calculate the probability of experiencing 4 rainy days in 7 days period starting with the day follow the rainy day.

**Method:**

*Markov Chain*

One of the stochastic processes. It is well-known on solving weather forecast. This method can examine the present result (rain or no rain) and to predict the weather for the next day.

**Working flow:**

A whiteboard with writing on it

Description automatically generated

Excel:

The day 0 = R, then day 1 until day 7 is the combination of 4 R and 3 N. Then the probability calculates base on the present state. Then we multiple the probability of every combination and sum it up to get the final probability which is 0.226643.A screenshot of a computer

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