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IT

A4

**Code:**

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| --- |
| import numpy as np |
| import math |
| import scipy.stats as st |
| size = len(randomNum) |
| lag = 5 |
| i = 5 |
| for i in range(i-1): |
| data = np.delete(randomNum, [i]) |
| rangecal = len(data) / lag |
|  |
| rho = 0 |
| for j in range(int(rangecal)): |
| rho += data[j\*lag] \* data[(j\*lag) + lag] |
| m = (size - i) / (lag - 1) |
| m = m - (m-int(m)) |
| mnew = 1 / (1+m) |
| rhoim = mnew\*rho - 0.25 |
| rhoim |
| x = math.sqrt(13\*m + 1) |
| stddev = x / (12\*(m+1)) |
| stddev |
| z = rhoim / stddev |
| z |
| pval = 2 \* (1 - st.norm.cdf(z)) |
| pval |

**Output:**



