

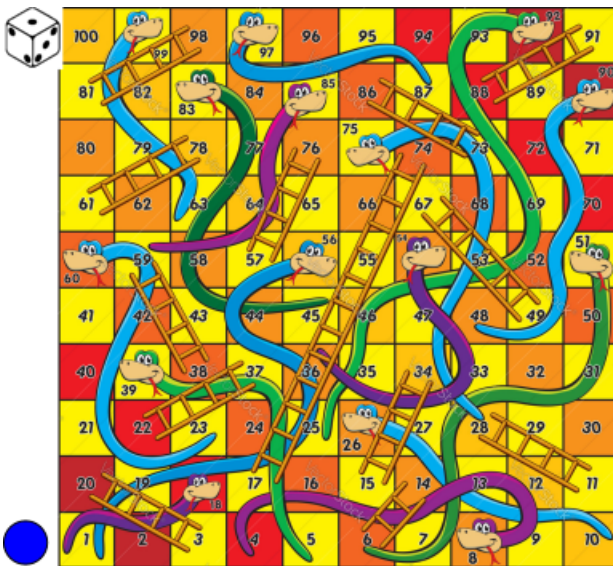
Statistical regularity

Arnab Chakraborty

Indian Statistical Institute

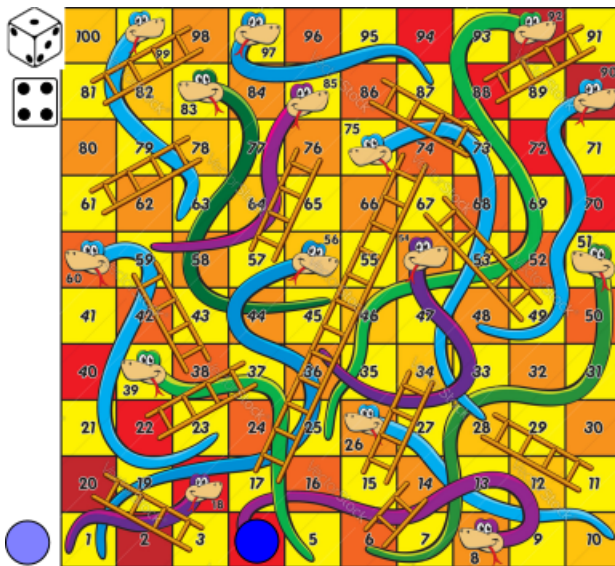
0+=NaN

"Snakes and Ladders" ludo

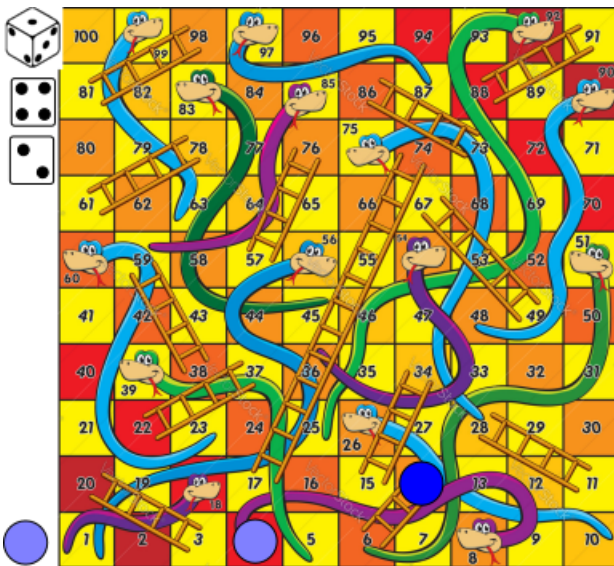


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"Snakes and Ladders" ludo



“Snakes and Ladders” ludo



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A strange ludo

1.

$$\begin{aligned} X_{new} &= 0.8X_{old} + 0.1 \\ Y_{new} &= 0.8Y_{old} + 0.04 \end{aligned}$$

2.

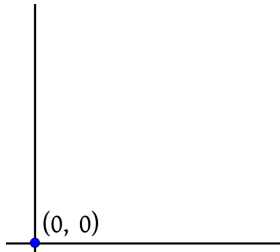
$$\begin{aligned} X_{new} &= 0.5X_{old} + 0.25 \\ Y_{new} &= 0.5Y_{old} + 0.4 \end{aligned}$$

3.

$$\begin{aligned} X_{new} &= 0.355X_{old} - 0.355Y_{old} + 0.266 \\ Y_{new} &= 0.355X_{old} + 0.355Y_{old} + 0.078 \end{aligned}$$

4.

$$\begin{aligned} X_{new} &= 0.355X_{old} + 0.355Y_{old} + 0.378 \\ Y_{new} &= -0.355X_{old} + 0.355Y_{old} + 0.434 \end{aligned}$$



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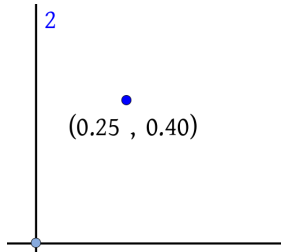
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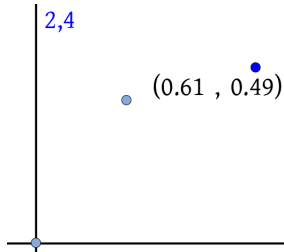
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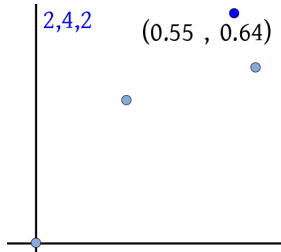
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$0+ = \text{NaN}$

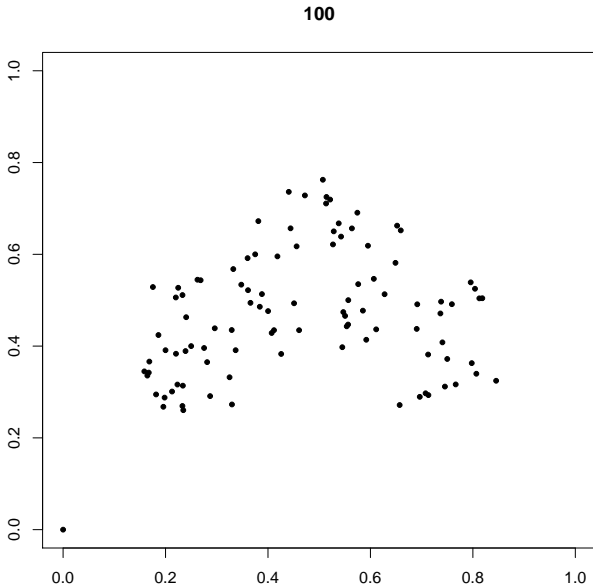
Try it out yourself!



<https://arnab-chakraborty.shinyapps.io/shny/>

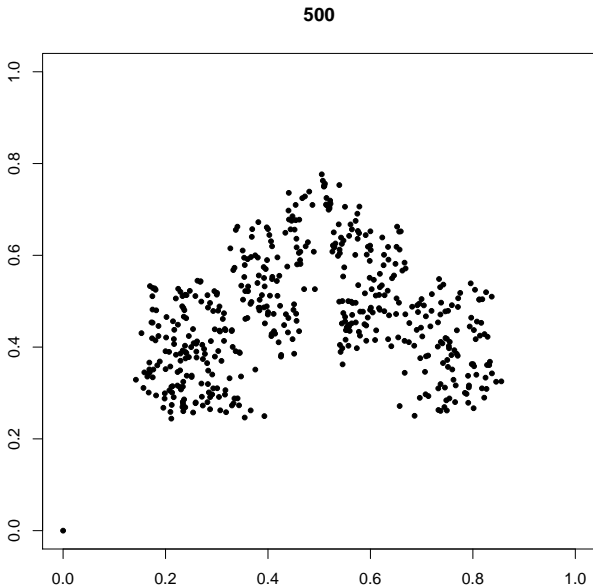
0+=NaN

A strange thing!



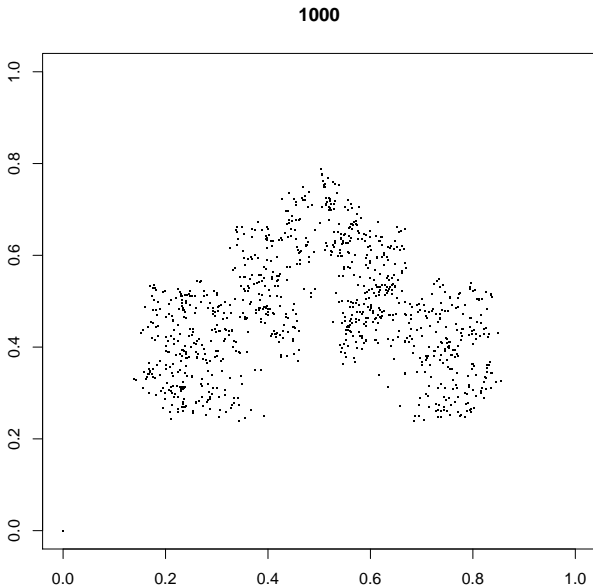
0+=NaN

A strange thing!



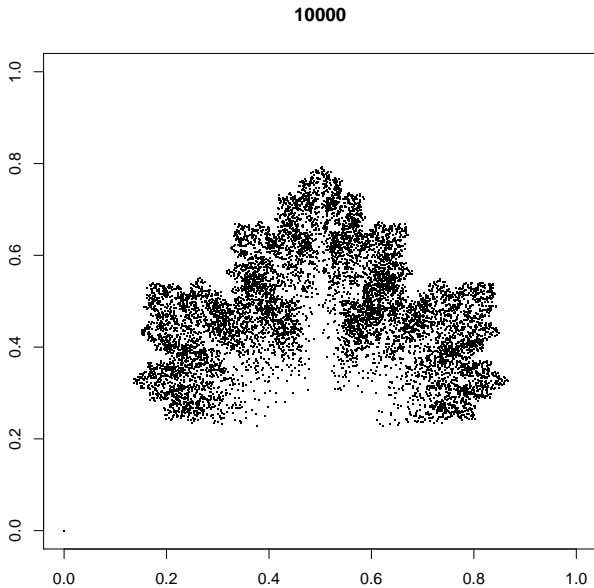
0+=NaN

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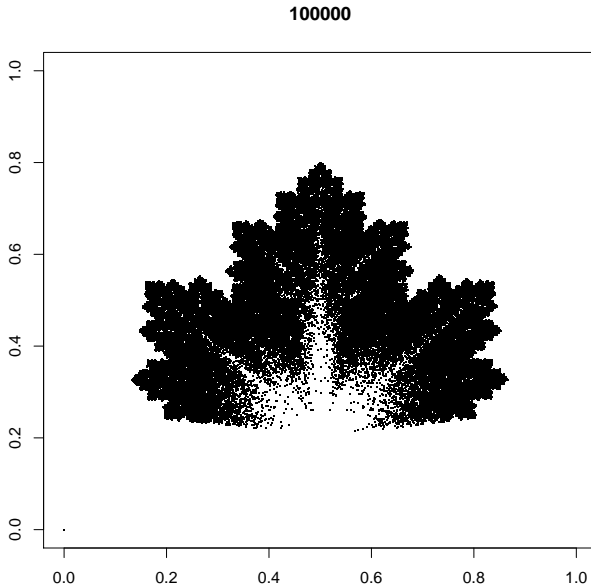
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