$\overline{\mathbf{Algorithm} \ \mathbf{1} \ \mathrm{simPi}()}$

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\overline{\textbf{Input: } TimesOfCalcul}
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Output: Pi

- 1: $CountIn \leftarrow 0$
- $2:\ CountOut \leftarrow 0$
- 3: for $i \rightarrow TimesOfCalcul$ do
- 4: $x \leftarrow random$
- 5: $y \leftarrow random$
- 6: CountOut + +
- 7: **if** $x^2 + y^2 \le 1$ **then**
- 8: CountIn + +
- 9: end if
- 10: $Pi \leftarrow (4 * CountIn)/CountOut$
- 11: end for