* Linked List Random Node.

If the linked List is extremely large,

use Reservoir Sampling.

$1, 2, 3, \ldots \longrightarrow$ nd null

$P = \frac{1}{n}$ for choosing one element.

$1, 2, 3, \ldots \longrightarrow n$

$\frac{k}{n} \longrightarrow$ for choosing k over n

$1 - \frac{1}{n} \longrightarrow$ not selecting $\Rightarrow \frac{n-1}{n}$