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Exercise for the lecture

Distributed Storage and Computer Forensic

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Sheet 5

EXERCISE 5:
Consider the following random balls-and-bins experiments and respective outcome. Calculate the probability of each experiment resulting in the given outcome.

1. $2n$ balls into n bins:
   "All bins have at least one ball."

2. n balls into n^2 bins:
   "There exists a bin with exactly 2 balls."

3. n balls into $\frac{n}{\log n}$ bins:
   "All bins have at least one ball."

4. n^2 balls into n bins:
   "All bins have at least $\Omega(n)$ balls."