- 為了做 proabilistic analysis, 必須失有 input distribution 資訊
  為了確保 input 完全 random 或 遵照某種 distribution → 需要用 randomized algo

- 可以透過 random-number generator 來將 input randoaized

以 hiring problem 為例, 在 prob analysis 下是以 random order permutation 為前提下做的
故 在分析前應失 randomly permute candidates 才对

RANDOMIZED-HIRE-ASSISTANT(n)

1   randomly permute the list of candidates
2   $best = 0$ // candidate 0 is a least-qualified dummy candidate
3   **for** $i = 1$ **to** n
4   interview candidate i
5   **if** candidate i is better than candidate $best$
6                $best = i$
7   hire candidate i

Lemma 5.3
The expected hiring cost of the procedure RANDOMIZED-HIRE-ASSISTANT is $O(c_h \ln n)$.

Proof   After permuting the input array, we have achieved a situation identical to that of the probabilistic analysis of HIRE-ASSISTANT.   ∎