We formulate four families of problem with which we aim at distinguishing different levels of randomness. The first one is completely non-random, being the ordinary Ramsey-Turán problem and in the subsequent three problems we formulate some randomized variations of it. These four levels form a hierarchy, the main topic of this work.

We formulate very briefly (and informally) the four questions for a special case. The questions are as follows:

Fix a family of graphs $\mathcal{L}$ and an integer $r \geq 2$.

(DD) How many edges guarantee for a graph $G_n$ that if we $r$-color its edges arbitrarily, we always find a monochromatic $L \in \mathcal{L}$? 

(DR) How many edges guarantee for a graph $G_n$ that in almost all $r$-edge-colorings, we find a monochromatic $L \in \mathcal{L}$?

(RD) How many edges guarantee for a random graph $R_n$?

(RR) How many edges guarantee for a random graph $R_n$ almost surely, that $r$-coloring its edges at random, almost all the $r$-colorings contain a monochromatic $L \in \mathcal{L}$?

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