1 Elementary programming test and practical conclusions

There is hardly anything easier for a programmer than to calculate averaging by an array of numbers. Also at the level of intuition we expect that the more data we consider, the better the result of the statistical formula `mean` application will be. On this path, however, we may be in for an unexpected situation.

1. Choose a sufficiently big (from your point of view) value of N and create an array D of N random at (0.1) numbers x using a random uniform generator (like `rand` in C etc)
2. Find the average for
   - Array D
   - Array of $1/x \quad x \in D$
   - Array of $1/\sqrt{x} \quad x \in D$
   - Array of $1/x^2 \quad x \in D$
3. Change the N value and repeat all. Compare the results.
4. Plot the dependency of the answeres from N-parameter