**Look-up Table:**

Look-up Table is an array (1D or 2D) that replaces runtime computation with a simpler array indexing

operation.

It is required when there is necessity of performing frequent computation on some array elements.

In look-up table we precompute the required computation and stored into 2D or 1D matrix

( based on requirement) and we access the result whenever it's required.

* Time complexity to generate look-up table is O(n^2).
* Space Complexity is O(n^2).
* Time complexity to access the computed result is constant i.e O(1).