❖Square Root:

Explanation: -

The square root of a non-negative number x is a value y such that y^2 = x. It is denoted as sqrt{x} and represents the principal (non-negative) root. Square roots are widely used in mathematics, science, and engineering, often appearing in geometry, algebra, and statistics.

Time Complexity: - $O(\log(\frac{1}{p}))$

Space Complexity: - $O(\log(\frac{1}{p}))$