

All Topics

- ★ *Types of data structure*
- ★ *Types of Algorithms*
- ★ *Memory allocation*
- ★ *Types of memory allocation*

- ★ *Asymptotic analysis*
- ★ *Big oh notation*

- ★ *Array*
- ★ *Operations*
- ★ *Types*
- ★ *Advantages*
- ★ *Disadvantages*
- ★ *Application*

- ★ *LinkedList*
- ★ *Operations*
- ★ *Types*
- ★ *Advantages*
- ★ *Disadvantages*
- ★ *Application*

- ★ *Recursion*
- ★ *Advantages*
- ★ *Disadvantages*
- ★ *Application*

- ★ *Strings*
- ★ *Problems*

- ★ *Binary search*
- ★ *Binary search with recursion*

Problems

- Binary Search -> $O(\log_2 n)$

The diagram illustrates the relationship between logarithmic and exponential forms. It consists of two equations connected by a double-headed arrow (\Leftrightarrow).

Left equation: $\log_b(n) = x$

- The base b is labeled "base" with an arrow pointing to it.
- The argument n is labeled "argument" with an arrow pointing to it.
- The exponent x is labeled "exponent" with an arrow pointing to it.

Right equation: $b^x = n$

- The base b is labeled "base" with an arrow pointing to it.
- The exponent x is labeled "exponent" with an arrow pointing to it.
- The argument n is labeled "argument" with an arrow pointing to it.

- Binary Search Recursive
- Reverse a LinkedList
- Reverse LinkedList in recursive
- Delete current Node