

# Data Structure

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# Searching operation of an Array

Search - To search an element from the array list.

# Search (Algorithm)

Take, Counter variable  $j$

Array  $AS[N]$ , Where  $N$  is size of an array

Search\_Item variable to store value of searching item

# Search (Algorithm-Cont..)

1. Initialize counter variable  $j$  with value 0.

$j=0$

2. While  $j < N$  repeat step 3 & 4
3. If  $LS[j] == \text{Search\_Item}$  then goto step 5
4. Increment counter  $j$

$j=j+1$

5. Print/Display  $j$ ,  $\text{Search\_Item}$
6. Exit

# Updating operation of an Array

Update - To update an element in the array list at selected position.

# Update (Algorithm)

Take, Counter variable  $j$

Array  $AU[N]$ , Where  $N$  is size of an array

Update\_Item variable to store value of searching item

Loc variable to store value of location which is to be updated

## Update (Algorithm-Cont..)

1. Set value of updated element at selected position of an array

`AU[loc-1]=Update_Item`

2. Exit

# Basic String Operations

- Finding a length of string
- Converting string into Uppercase and Lowercase
- Appending string to another string
- Reversing a string



# Finding a length of String

1. Set  $i=0$
2. While  $\text{str}[i] \neq \text{Null}$  repeat step 3
3.  $i=i+1$
4.  $\text{Length}=i$
5. Exit