

# Data Structure

Prepared By: Prof. Kinjal Bhalodiya

# Reversing a string

1. Set  $i=0$ ,  $j=\text{length}(\text{str})-1$
2. While  $i < j$  repeat steps 3 to 5
3. Swap ( $\text{str}[i]$ ,  $\text{str}[j]$ )
4.  $i=i+1$
5.  $j=j-1$
6. Exit

# Comparing Length of Two Strings

1. Set  $i=0$
2. Set  $\text{len1}=\text{length}(\text{str1})$ ,  $\text{len2}=\text{length}(\text{str2})$
3. If  $\text{len1}>\text{len2}$ 
  - Print "String1 is greater than string2"
  - Else if  $\text{len1}<\text{len2}$ 
    - Print "String2 is greater than string1"
  - Else
    - Print "Equal"
  - End
4. Exit

# Comparing Content of Two Strings

1. Set  $i=0$
2. Set  $\text{len1}=\text{length}(\text{str1})$ ,  $\text{len2}=\text{length}(\text{str2})$
3. If  $\text{len1} \neq \text{len2}$ 
  - Print "Not Equal"
  - Else
    - Repeat while  $i < \text{len1}$ 
      - If  $\text{str1}[i] == \text{str2}[i]$ 
        - $i=i+1$
      - Else
        - Print "Not Equal" break;
    - End
  - End
  - If  $i = \text{len1}$ 
    - Print "Equal"
  - End
4. Exit

# Task-1

- Develop an algorithm for inserting a new string at given position.
- i.e. Enter Main String: Cls
- Enter New String: as
- Enter location where you wan to insert the new string: 2
- Final String: Class

## Task-2

- Implement a C code to inserting new string in the main string.
- i.e. Enter first string: DS  
Enter Second string: Class  
Final string: DSClass