# Java String Programs – Practice List

## Basic String Programs

1. Print a String
2. Find length of a String (without using length())
3. Reverse a String
4. Check if String is Palindrome
5. Count vowels and consonants
6. Count number of characters
7. Count number of words
8. Convert String to uppercase & lowercase
9. Compare two Strings (equals vs ==)
10. Remove spaces from a String

## Intermediate String Programs

1. Find duplicate characters in a String
2. Count frequency of each character
3. Check if two Strings are anagrams
4. Replace a character in a String
5. Remove duplicate characters
6. Find first non-repeating character
7. Reverse each word in a String
8. Capitalize first letter of each word
9. Find longest word in a sentence
10. Count occurrences of a substring

## Advanced / Logic-Based String Programs

1. Check if String contains only digits
2. Remove special characters
3. Check if String is rotation of another String
4. Find all permutations of a String
5. Find longest palindrome substring
6. Compress a String (aabbb → a2b3)
7. Find maximum occurring character
8. Convert String to Integer without parseInt()
9. Split String without using split()
10. Toggle case of each character

## StringBuffer / StringBuilder Programs

1. Reverse String using StringBuffer
2. Append multiple Strings efficiently
3. Compare performance of String vs StringBuilder
4. Insert and delete characters
5. Demonstrate mutability of String vs StringBuilder

# Scenario-Based Programs

1. Password validation using String
2. Email ID validation
3. Count words starting with vowel
4. Find repeated words in a paragraph
5. Remove extra spaces from a sentence