

## Assignment – 9

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1. Create Strings with new operator and without new.
  - a. Create 2 string using literal and Compare string using == see same reference is there.
  - b. Create 2 string using new and Compare string using == see different reference is there.
2. Write a code to prove that strings are immutable in java?
3. Write a program to find the number of vowels, consonants, digits and white space characters in a string.
4. Write a Java program to find second occurrence of a character in a given string.
5. Write a Java program to count occurrences of a word in a given string.
6. Write a Java program to convert uppercase string to lowercase (without using string function)
7. Write a Java program to trim leading white space characters in a string.(using string function and without using string function)
8. Write a Java program to remove first and last occurrence of a word from string.
9. Write any 5 string functions with syntax. State its use.
10. Write difference between String and String Buffer?
11. Write a Java program to find reverse of a string(using function).
12. Write a Java program to replace first occurrence of a character with another in a string (using string function).
13. Write a program that takes your full name as input and displays the abbreviations of the first and middle names except the last name which is displayed as it is. For example, if your name is Robert Brett Roser, then the output should be R.B.Roser.
14. Write a program to find average of digits in string.  
E.g. input string is "a5i9gfj4tabc" output: 6
17. Write a program to find out the largest and smallest length word in the string "This is an umbrella".

18. Input a string of alphabets. Find out the number of occurrence of all alphabets in that string. Find out the alphabet with maximum occurrence.
19. Write a function to find the substring between “is” and “of” (using string function)  
String s1=“Avinash is a cricket player and he is a captain of the
20. WAP to check if two Strings are anagrams of each other?  
(Two strings are anagrams if they are written using the same exact letters, ignoring Space, punctuation and capitalization. Each letter should have the same count in both Strings E.g. Army and Mary is anagram of each other)
21. Create a User {String username, String password} Ask user to enter username and password. Find out username and password entered by user is valid or not. Do some validations for password entered by user as follows and display appropriate message to user. Validation Message as follows -
- If password length is less than 8 - password must be 8 chars long.
  - If password does not contain # or @ - at least one special @ or # character must be present.
  - If password does not contain number 0 – 9 - password must contain at least one digit.
  - If password contains space - password must not have space.
  - If password does not contain uppercase char - password must have at least one uppercase letter.
  - If user enters password tQ123 - message will be password must be 8 chars long. At least one special @ or # character must be present.
22. Special words are those words which start and end with the same letter. Examples - EXISTENCE, COMIC, WINDOW. Palindrome words are those words which read the same from left to right and vice-versa. Examples - MALAYALAM, MADAM, LEVEL, ROTATOR, CIVIC. All palindromes are special words, but all special words are not Palindromes. Write a program to accept a word, check and print whether the word is a Palindrome or only special.

23. What is the Output Of the following Program

```
class demo1 {  
    public static void main(String args[])  
    {  
        String str1 = "java";  
        char arr[] = { 'j', 'a', 'v', 'a', ' ', 'p',  
            'r', 'o', 'g', 'r', 'a', 'm', 'm', 'i', 'n', 'g' };  
        String str2 = new String(arr);  
        System.out.println(str1);  
        System.out.println(str2);  
    }  
}
```