

BCA1317A02 Java Programming Lab

Warm up with basics of Java

Lab #3 (Due date: 23/09/2020 11:59 PM)

Topics: Array and Strings

Arrays

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1. Create an array of integer type in different ways.
2. Create an array of integer type and store the values of float types. Report the error that you get.
3. Create an array of character types. Can we convert this array into a String? If yes, please do.
4. Write a program to create arrays of all the primitive types.
5. Write a program to iterate over the array and print its elements. (Use for loop)
6. Write a program to iterate over the array and print its elements. (Use while loop)
7. Write a program to iterate over the array and print its elements. (Use for each loop)
8. Write a program to print the elements of an integer/float array after doubling.
9. Write a program that sums the elements of a char array.
10. Find the length of an array.
11. Write a method which takes an array as a parameter and returns the sum of all of its elements.
12. Write a program to access an element of the array beyond its length. Report the error/exception if any.
13. Write a program to copy all elements of one array into another array.
14. Write a program to find the frequency of each element in the array.
15. Write a program to print the duplicate elements of an array.
16. Write a program to print the elements of an array in reverse order.
17. Write a program to print the elements of an array present on even position.
18. Write a program to print the elements of an array present on odd position.

2D Array, Jagged Array and Matrix

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19. Write a program to create and print the elements of a 2D array of float type.
20. Write a program to create a jagged array of integer type.
21. Write a program to find the frequency of odd & even numbers in the given matrix
22. Write a program to find the sum of each row and each column of a matrix
23. Write a program to determine whether two matrices are equal
24. Write a program to add two matrices
25. Write a program to subtract the two matrices.
26. Write a program to multiply a matrix with a scalar.

Strings (String, StringBuffer and StringBuilder)

Note: Choose the String/StringBuffer/StringBuilder appropriately while creating a string for solving the problems.

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27. Write a program to create a take a string from user and print that string.
 28. Write a program to create an array of strings.
 29. Write a program to find length of a string.
 30. Write a program to copy one string to another string.
 31. Write a program to concatenate two strings.
 32. Write a program to compare two strings.
 33. Write a program to convert lowercase string to uppercase.
 34. Write a program to convert uppercase string to lowercase.
 35. Write a program to toggle case of each character of a string.
 36. Write a program to find total number of alphabets, digits or special character in a string.
 37. Write a program to count total number of vowels and consonants in a string.
 38. Write a program to count total number of words in a string.
 39. Write a program to find reverse of a string.
 40. Write a program to check whether a string is palindrome or not.
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