

DEPARTMENT OF COMPUTER SCIENCE
GUJARAT UNIVERSITY
MCA – II
JAVA Programming Assignment – II (Arrays and Strings)

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Last Date of Submission : &date

- 1) Write application that creates an array of double, to provide following functionality.
 - display the length of the array and its elements.
 - Display an array. (Use for each version of loop for display).
 - compute the sum of the squares of these numbers.
 - Determine Mean and Median of an array.
 - Sort an array – Ascending and Descending. Use any two sorting algorithm. User can also select the sorting method.
 - Search an element from the array, i.e. returns the location of the element of an **array** that matches an indicated value.
 - Copy of an array.
 - Reverse of an array.
- 2) Write a program in Java to create variable size **array**. Data can be numeric.
 - Flush an array
 - add a number at a specified location in an array.
 - display the array
- 3) Program in Java to find A+B, A-B, A*B and transpose of A, where A is a matrix of 3*3 and B is a matrix of 3*4. Take the values in matrices A and B from the user.
- 4) Write and run a JAVA program that reads a string from the user and perform the following.
 - ❖ counts number of occurrence of a given character (for example, "a") in a **string**.
 - ❖ searches the last occurrence of a character in a **string**.
 - ❖ removes the unnecessary spaces from a **string** : leading and trailing spaces.
 - ❖ displays the substring formed by the last ten characters of a string
- 5) WAP that inputs a line of text, tokenizes the line with StringTokenizer and outputs the tokens in reverse order.
- 6) Create a StringBuffer and illustrate how to append character. Display capacity, length of the StringBuffer.
- 7) Write an application that reads and processes strings from the console. Perform the following functions based on the menu choice selected by the user..
 - Reverse the sequence of strings and then display it.
 - Reverse the sequence of characters in each string and then display it.
 - rearrange the strings according to the length of the string.
 - Sorting
 - Concatenation
 - Change them to uppercase, lowercase depending on user's choice.