

**Jadavpur University**  
**Department of Computer Science and Engineering**  
**MCA, 1<sup>st</sup> Year, 1<sup>st</sup> Semester**  
**Programming Practice Lab**  
**Assignment-2**

1. Write a program to take an array of numbers and sort in descending order
2. Write a program to find minimum and maximum of an array
3. Write a program to find mean, mode and standard deviations of a list of numbers.
4. Write a program to swap odd positioned numbers with even positioned number in a array
5. Write a program to search an element in the array. If it is found, print index else print "number is not found".
6. Write the number of vowels & consonants of any entered line of any input string.
7. Write a program to insert an element in the array such that the resultant array remain sorted,
8. Write a program (W.A.P.) to take one string then print it in the reverse order and check whether the input string is Palindrome.
9. Write a program to take a line of text then convert all the alphabets of it to uppcase.
10. Write a program to find norm of matrix  
Norm of matrix= square root of sum of square of all elements in the matrix
11. Write a program to find transpose of matrix
12. Write a program to multiply two n x n matrices.
13. Write a program to take two 2-D arrays then sort those two arrays, finally store the sum of them into a third array that will also be sorted.
14. Write a program to take one 2-D array, find the transpose of it, finally print the multiplied value of the matrix with its transpose.
15. W.A.P. to generate the Pascal's triangle:--  
1  
1 1  
1 2 1  
1 3 3 1  
1 4 6 4 1.....upto 10 lines
16. Write a menu driven program, consisting of following functions (on string), without using any library functions:--  
Strlen()  
Strcpy()  
Strcat()  
Strrev()  
Strcmp()
17. Write a program to input a line from keyboard then encode it to its next alphabet or digits, then print the newly generated line  
e.g. Input :-- today is 27 of September Output:-- upebz jt 38 pg tfqufnafs
18. Write a program to convert the capital letters of any string to small letter and vice-versa, finally print the changed string.