

# Assignment 2

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## Lab Exercise (LE)

1. WAP to store n employees data such as employee name, gender, designation, department, basic pay. Calculate the gross pay of each employees as follows:  
Gross pay=basic pay + HR + DA  
HR=25% of basic, DA=75% of basic.
2. WAP to add two distances (in km-meter) by passing structure to a function.
3. Add two complex numbers by passing structures to a function
4. Calculate the difference between two time periods using structure
5. Store information of n students using structures and Dynamic Memory Allocation.
6. C program to read a one dimensional array, print sum of all elements along with inputted array elements using Dynamic Memory Allocation.
7. WAP using C to Evaluate the Given Polynomial Equation  $f(x)$ . Note: Order of polynomial, co-efficient and value of x will be user input.
8. WAP using function that adds given two polynomials  $f(x) = h(x) + g(x)$
9. WAP to check whether the given matrix is sparse matrix or not.

## Home Exercise (HE)

1. WAP to print all permutations of a given string using pointers.
2. WAP to arrange the elements of an array such that all even numbers are followed by all odd numbers.
3. WAP to find the transpose of a matrix.
4. WAP to find determinant of  $3 \times 3$  Matrix.
5. WAP to Find Largest Element in an Array using Recursion.
6. WAP using function to find frequency of occurrence of numbers in an array.
7. WAP to determine whether the given matrix is a lower triangular or upper triangular or tri-diagonal matrix.