ROLL	
NAME	

Learning outcome: Students will be able to implement user-defined functions.

ASSIGNMENT: IV

Sl. No	Program Listing	Date	Signature
1	Write a program to compute the mean, mode and median of the given a list of numbers by using functions.		
2	Write a function to check whether a given number is prime number or not.		
3	Write a function to calculate the factorial of a number using recursion.		
4	Write a function to implement binary search using recursion.		
5	Write a function to compute the LCM of two numbers.		
6	Write a conversion program to convert decimal to binary and binary to decimal using functions.		
7	Write a program to add, multiply, transpose of matrices by using functions.		
8	Write a program that converts temperatures between Celsius and Fahrenheit using lambda functions.		
9	Write a program that calculates and displays the volume of sphere, cylinder, cube and cone, based on user input. Define a function for each shape, using default values for some of the arguments (e.g., radius, length).		
10	Write a program that calculates the average of a variable number of values passed as arguments to a function.		
11	Write a password validation program that checks if a given password meets certain criteria (e.g. at least 8 characters, one capital case, one lower case, one numeric and one special character). Use a nested function to validate each criterion separately.		
12	Write a program that stores and manages student information using a Python function with keyword arguments. Name (required), Age (optional, default to None) and Grade (optional, default to None). Perform the following tasks: add, delete, update and display student information.		

SIGNATURE OF STUDENT.....

SIGNATURE OF FACULTY.....