

Assignment 3

File handling

1. WAP to do following using file handling

- a) create a file number.txt and store 3 user defined numbers joined using ','.
- b) Read the content of number.txt file as a string file and split them into 3 numbers. Then find factorial of difference between largest and smallest among 3 numbers. Finally append the factorial as factorial=obtained factorial in number.txt
- c) Rename the file as fact.txt

2. WAP to do following using file handling

- a) create a file Myself.txt and store information about your received through terminal
- b) Copy the content of Myself.txt to backup.txt
- c) Read the contents of Myself.txt and reverse it and store it in the Myself.txt
- d) Read the contents of Myself.txt and compare it with the content of backup.txt to findout palindrome strings
- e) Delete the file backup.txt

Program with classes and objects

1. Wap to findout area and perimeter of a triangle having three sides using class?
2. Wap to findout area and perimeter of a rectangle and square using class ?
3. Wap to display the order in which constructors and destructors are invoked during runtime in class ?
4. Wap to swap two numbers without using 3rd variable and with using 3rd variable using class?
5. WAP to compute number of objects of a class has been created using data hiding technique of class?
6. WAP to compute simple interest and compound interest for different banks like SBI,UBI, AXIS having individual rate of Interest using method overriding, multiple inheritance and abstract class.
7. Wap to findout volume of a box using simple inheritance ?

8. Wap to findout volume, cost and weight of a box using multilevel inheritance with and without super keyword?
9. Wap to findout area and perimeter of rectangle and square using method overriding and abstract class ?
10. Wap to generate prime numbers in between 10 to 50 and store it in list ,find avg of all prime number in the list ,check for palindrome numbers available in the list and store in another list, Display no of elements with elements in prime list and also display no of elements with elements in palindrome list using multiple inheritance
11. WAP to find factorial, GCD, LCM ,generate prime numbers in between user defined range, and generate febonacci series in between user defined range using multiple inheritance?

1. WAP to perform following computation on stack using function like push, pop, isempty, isfull, peak and use class and objects and multilevel inheritance
 - I. Create an stack of user defined size using list
 - II. Insert 20 user defined values in the stack using is full and push operation in stack
 - III. Search for an user defined element in the stack using peak operation of stack
 - IV. Delete 5 elements from stack using pop operation
 - V. Display all remaining elements of stack
2. WAP to perform following computation on queue using function like insert, delete, isempty, isfull, peak and use class and object with multiple inheritance
 - VI. Create an queue of user defined size using list
 - VII. Insert 20 user defined values in the queue using is full and insert operation in stack
 - VIII. Search for an user defined element in the queue using peak operation of stack
 - IX. Delete 5 elements from queue using delete operation
 - X. Display all remaining elements of queue
3. WAP to perform following using class and object and multilevel inheritance and also use list for different users for deposit, withdraw, check balance for banking application
 - I. Generate account number of new user and store information like account number, name, mobile no and initial balance in different list
 - II. Assign a fixed value as balance for account
 - III. Deposit user defined amount and display updated balance
 - IV. Withdraw user defined money if user has sufficient fund otherwise show insufficient fund
 - V. Check for balance

- VI. Maintain a fixed amount 3000 in the account
4. WAP to perform following using class and object and multilevel inheritance and also use list for different users to implement ATM simulation
- A. Generate account number and accept pin from users of new user and store information like account number, pin, name, mobile no and initial balance in different list
 - B. Assign a fixed value as balance for account
 - C. Ask user to enter account number and pin
 - D. Verify user using account number and pin if user is valid then Provide different options like withdraw, fast withdraw, change pin, and check balance otherwise alert user by providing Invalid pin or account number
 - E. Withdraw user defined money if user has sufficient fund otherwise show insufficient fund in withdraw option also in fast withdraw provide some fixed amount like 500, 1000, 2000, 5000 etc as option to user to select for withdraw
 - F. Check for balance
 - G. If user wants change pin and update pin in the list