1. Problem statement: Given an array of N elements and the task is to print the elements of an array after left rotating array elements by d positions.

Input: N, d and next line containing the n elements of array.

Output: Array elements after d rotation.

Example:

Input: n = 7, d = 2

array elements: 1 2 3 4 5 6 7

Output: 3 4 5 6 7 1 2

2. Problem statement: Write a C++ program to print all the non-repeated numbers in an array in minimum time complexity.

Input Example:

Array length: 10

Array input: 2 5 3 2 4 5 3 6 7 3

Output: Non-repeated numbers are: 7, 6, 4

3. Problem statement:

Write a C++ program to print all the repeated numbers with their frequency in an array in minimum time complexity.

Input Example:

Array length: 10

Array input: 2 5 3 2 4 5 3 6 7 3

Output:

Repeated number Frequency

- 3 3 5 2 2 2
- 4. Given a string, compute recursively a new string where identical chars that are adjacent in the original string are separated from each other by a "\*".

Sample Input 1: "hello"

Sample Output 1: "hel\*lo"

Sample Input 2: "xxyy"

Sample Output 2: "x\*xy\*y"

Sample Input 3: "aaaa"

Sample Output 3: "a\*a\*a\*a"

- 5. Write a program to print the area of a rectangle by creating a class named 'Area' taking the values of its length and breadth as parameters of its constructor and having a function named 'returnArea' which returns the area of the rectangle. Length and breadth of the rectangle are entered through keyboard.
- 6. Create a class named 'Student' with a string variable 'name' and an integer variable 'roll\_no'. Assign the value of roll\_no as '2' and that of name as "John" by creating an object of the class Student.
- 7. Write a program that would print the information (name, year of joining, salary, address) of three employees by creating a class named 'Employee'. The output should be as follows:

Name Year of joining Address

Robert 1994 64C- WallsStreat

| Sam  | 2000 | 68D- WallsStreat |
|------|------|------------------|
| John | 1999 | 26B- WallsStreat |