

## **Session-2 Lab**

1. Write a program to find out all the armstrong numbers within a given range using a method named printArmstrongNumber( int start, int end) by taking input from the user. The program should print the Armstrong number in a given range starting from “start” and ending with “end”.

Armstrong Number Example:  $153 = 1^3 + 5^3 + 3^3 = 153$  (Number which is equal to the sum of the cubes of its digits)

Note: input should be taken from the keyboard. Use a loop to calculate the Armstrong number from “start” to “end”. Also use loops to calculate the cube of a number. Do not use the Math.pow() function.

2. Write a program to calculate the gross salary of a group of employees. Basic salary should be taken from the user.

If the basic salary is greater than 15000 ,HRA=20% and DA=60% will be given, else HRA=3000 and DA 70% will be given to the employee.

Note:Input of basic salary will be taken from the keyboard. After calculating the salary of one employee, the program will ask for the user's choice as int. If “-1” is entered then the loop will continue and the loop will exit for other int inputs.

3. Write a program to count and print the total number of odd and even numbers from user inputs. Program will ask for user inputs in a loop. Loop

will terminate if -1 is entered as input.