**LOVELY PROFESSIONAL UNIVERSITY**

**Assignment No. 1**

**School: SCA Faculty of: LFTS**

**Course Title: PROGRAMMING IN JAVA-LAB Course Code:CAP680**

**Section:D2217,D2221 Group 1**

**Date of Allotment:6 feb Last Date of Submission: 11 feb**

**Important Guidelines:**

1. Allocated Question according to odd/even roll number in this Assignment.

2. After solving assignment in Sandbox make a pdf file and upload onto the prescribed link which will be shared by faculty member.

3. Refrain from indulging into plagiarism as copy cases will be marked zero

4. For every program it is mandatory to give proper documentation.

**Set-Odd**

Q:1.Consider a situation where the class teacher wants to find the name of the student who has scored highest marks and he is teaching 3 sections.Each section has 50 students .Find the student who hasgot the highest marks among the 3 sections.

Q2:There are x mice and x holes placed in a straight line. Each hole can accommodate only 1 mouse.The position of the mouse is such that it can stay at his position or move towards right one step from x to x + 1, or move towards left one step from x to x - 1. It takes only 1 minute to follow any of these moves. Assign mice to holes so that the time when the last mouse gets inside a hole is minimized.

**Set-Even**

Q:1.Consider a situation where 1 sections has 100 students .Teacher has to find the students having palindrome name and also publish the name of the students .Find the number of students who have palindrome names and print all of them.

Q2:4.A person is hired for seven days to work on the employer's house and as a compensation a gold bar is paid to him. The gold bar is divided into seven pieces and is connected with each other like a chain. A piece of gold is given to him at the end of everyday work. What and where are the minimum number of cuts to the chain of gold bar pieces will be made, so that you can pay him a piece of gold every day?