## Lab9: Inheritance, Containership, Constructors and Destructors

- 1. Write a program to demonstrate containership in C++?
- 2. Write a program in C++ to design a class Validate\_Email which contains a static data member "email\_address" and static member function "check()" -- to validate given email address is valid or not. If the "email\_address" violates any of the following conditions then a message should be displayed as "Invalid email address".
- i) it must have '@' symbol in the middle of the string.
- ii) The string must be terminated with ".com"
- 3. Write a program using parameterised constructor to
- (i) read the figures,
- (ii) calculate the batting average and
- (iii) print the complete table in the decreasing order of the average by including average.

| Name      | Runs | Innings | Times   |
|-----------|------|---------|---------|
|           |      |         | not out |
| K L Rahul | 3230 | 60      | 18      |
| Rohit     | 8430 | 120     | 15      |
| Sharma    |      |         |         |
|           |      |         |         |

## 4.

An election is contested by 3 candidates and the candidates are numbered from 1 to 3. The voting is done by marking the candidate number on the ballot paper.

Write a program using constructor and destructor to

- (i) cast the vote for user supplied n voters, and to
- (ii) read the ballots and count the votes for each candidate.

In case a number read is outside the range of 1 to 3, the ballot should be considered as a 'spoilt ballot' and the program should also count the number of spoilt ballots