Assignment Set 2 (Logic programming using PROLOG) *Additional Question*
(Exclusively for Groups with 3 members; others please ignore)

- **Assignments will be evaluated by the TAs.**
- **You should submit complete source codes.**
- **All codes must be properly documented and good code writing practice should be followed (carry marks).**
- **Copying is strictly prohibited. Any case of copying will automatically result in F for the whole course, irrespective of your performance in the other parts of the lab.**
- **Submission deadline: 27th October, 2019**
- **Marks: 20**

Problem 4: ChessBoard Moves (20 Marks)

Consider a chessboard whose squares can be represented in coordinate form [X;Y], where X and Y can take any value from 1 to 8.

Write a program in PROLOG to simulate the moves of all the six types of pieces viz. King, Queen, Bishop, Knight, Rook and Pawn. In the query, the initial position of the piece will be provided and the result will be all legal positions (in an empty chessboard) of the piece in a single move.

Sample Input/Output

?- Knight_move([1;1],S).

S=[3;2]

S=[2,3]