**Assignment 3**

1. Consider a relation R with the schema R(A, B, C, D, E, F) with a set of functional dependencies F as follows;

{*AB → C, BC → AD, D → E, CF → B*}

Find the super key for this relation.

1. Describe Normalization in DBMS. Differentiate between 1NF and 2NF.
2. Consider a relation R ( A , B , C , D , E , F , G ) with the functional dependencies-

A → BC

BC → DE

D → F

CF → G

Calculate closure of AB, AC, B, ABC, and BD. Also determine the super key