Assignment 5

1. Using Domain and Tuple Calculus answer the following:
   Project(project#,p_name,chief_architect)
   Employee(emp#,ename)

   a) Obtain the list of employees working on project comp212
   b) Get the employee details of the employees working on a database project
   c) List the complete details about the employees working on both comp212 and comp555
   d) Get the employee number of employees who do not work on project comp555
   e) Compile a list of employee numbers of employees who work on all the projects.

Assignment 6

1. What do you mean by lossless joins? Explain with suitable examples
2. What do you mean by functional dependency? Explain the different types
3. R={A,B,C,D,E}   F={A→BC,B→D,CD→E,E→A}
   Check whether F is the canonical cover of itself. If it is not then what is the canonical cover?
4. What is the need for normalization? Explain 1st, 2nd, 3rd NF with examples.