# Home Work 1, CS344, Fall' 11, IITG [Due on August 16, before class]

Instructions:

1. Write precise and to-the-point answers. Please avoid writing long paragraphs or essays.
2. Avoid buzzwords (*information era, cyber world, edutainment….*) and trivial meaningless sentences (*This is obviously a big problem. A DBMS will automatically solve this problem…..*).
3. It will be great, if you can answer in terms of exact or estimated numbers with proper citations and standard computer science terminology.
4. Drawing explanatory diagrams, giving relevant examples, and providing analogies from other facets of computer science are some of the ways to make your answers more attractive and meaningful.
5. Expected time required to complete this home work is three hours.

Question 1 [15 points]: Precisely describe any social/scientific/business problem that you observe around. Explain how knowledge of DBMS can help to solve this problem completely or partially.

Question 2 [10 points]: State at least two applications where using a conventional file system with programs written in procedural languages is a better option than using a DBMS for data management.

Question 3 [5 points]: Many object oriented programming languages provide option to serialize (store) objects to a persistent storage. You can serialize objects to a text file, a binary file, or a DBMS. How will you make the choice?