Computer Networks involves the study of computer systems, computer communications, computer networks and distributed and systems, emphasizing the ability to evaluate system performance at all levels of activity (but principally from the systems viewpoint) and to identify the key parameters of global system behavior.Computer Networks thus provides the techniques for system performance evaluation, design,modelling and system structure improvements.

The tools which are typically used to carry out above technique include:
•probability theory
•queuing theory
•queuing networks
•graph and network flow theory
•mathematical programming
•optimization theory
•operating systems design
•computer communication methods and protocols
•simulation
•measurement
•analysis of algorithms
•models of computation
•heuristic design procedures

Among all these tools ,simulation is the best analysis and evaluation tool.As every simulation is tight to a model that represents the real world, modeling itself is a crucial step towards meaningful results with accuracy. Simulation tool improves the designer's understanding of the system beyond any analytical model alone can provide.

We sit our Graduate class gain knowledege about the therotical aspects, we design our protocol or our theories ,this forms part one entity.Real world secnario with all contraints ,where we need to implement out theories forms the second entity.But how do we brigde the enormous gap between these two entites? And anwer is simple we use a SIMULATION tool.

Therefore i have choosen my topic as "NETWORK :MODELLING AND SIMULATION". Under this topic , i'll be delivering

•importance of simulation
•brief history(networks and simulation)
•discuss various Simulation tools.
•requirements of network simulation tools
•discuss how to build a simple simulating model.

NOTE: I Abhaykumar Kumbhar, alone will be working on this research topic and i will be give a presentation and the reason to give presentation is to tell my fellowmates the importance of SIMULATION in this real world.