CONCLUSION AND FUTURE SCOPE

The power consumption in transmitting a packet is directly proportional to the square of the distance between the source and destination, more is the distance more is the power consumed and lesser is the effective network life time. The nodes thus tries to select their intermediate nodes to relay the packets in order to increase its effective life time, reduce average power consumption of the overall network but at the same time introduces congestion since the number of nodes involved in routing process gets increased by adopting the strategy proposed.

In this work a new routing protocol has been proposed for implementing routing protocol for ad hoc network. The proposed protocol is power aware keeping in view the power constraint of nodes being used in the ad hoc network.

To test the performance of the protocol a program has been designed in C++. This implementation in C++ has allowed us to check the performance of the protocol under various conditions. This performance has been illustrated in the forms of the graphs and tables in the previous chapter of this dissertation. The results are quite satisfactory indicating that the proposed protocol has feasible implementation.

The performance evaluation of various routing protocols will help to make proper selection of routing protocol in ad-hoc networks according to the traffic, size of the network, and QoS requirement. This will positively decrease the computational cost by a large amount and reduce the protocol overhead to improve the network utilization as well as fulfill the QoS requirements for packet. The modified AODV will outperform the conventional AODV in terms of routing overhead and packet delivery ratio. The simulation result shows that the modified AODV outperforms the other protocol in terms of throughput, delay and routing load. The throughput gets increased and the normalized routing load gets decreased. The end 2 end delay is also get decreased. In future following work can be done:

1. The analysis of proposed protocol for various other parameters.
2. The proposed protocol can be extended for security.
3. The proposed protocol can be extended to deal with various attacks.

The testing of the protocol in the present work has been done in isolated environment where conditions are not standard. However to check the actual applicability of protocol it is mandatory to check this protocol under an industrial standard environment. So that actual rating of a proposal can be made. Such an environment is provided by standard software's like NS2 and Qualnet. However to test a protocol in NS2 and Qualnet the C++ code of the protocol has to be physical augmented. The implementation of the protocol in C++ has accomplished this task. Now, the future work is to customize this implementation so as to create its augmentation compatibility with NS2 or Qualnet. Then the proposed protocol can be actually tested in the standard condition and its performance can be compared with the other existing routing protocols.