CHAPTER 5: CONCLUSION AND FUTURE WORK

5.1 CONCLUSION

Cloud computing is one of today’s most exciting technologies, because it can reduce the cost and complexity of applications, and it is flexible and scalable. These benefits changed cloud computing from a dreamy idea into one of the fastest growing technologies today. As seen with advantages of cloud, there are some threats also, as people are reluctant to save their data outside or to give whole control of their personal information to cloud because of security and privacy reasons. Here DBaaS or “Database As A Service” is being discussed. A model has been designed named DEM [Data Encryption Model] in the chapter-04. Algorithms have been developed and also tested. Some experimental results and discussion have been provided.

In this research work, we have proposed a DEM model, and attempts to improve customer’s satisfaction for placing their precious data by encrypting it first before placing on the third party cloud data servers. According to this model, first data is encrypted before transferring on the cloud data server and querying data is also done on the encrypted database. As this data is not understandable in its encrypted form, so chances of information leaks are minimized. The major requirement here is to place customer’s sensitive data in a manner so that data is secure or protected from damage. So in DEM model the sensitive data is taken proper care while saving to database. So a successful approach is made for securing the sensitive data on cloud servers and maintaining privacy.
so as to increase trust in users so that benefits of this new technology is being taken up by everybody.

5.2 FUTURE SCOPE

Future researcher may choose to extend this work because research in this direction is still in progress and new challenges will come in future. Cloud computing is itself a field where lots of development is being done on a regular basis. Also, there are a number of works which can be done. There are many things which can be done to this work. More database related tasks can be added, which can be as per requirements of customers. Here work has been done successfully up to insertion, sorting, retrieval, updation and deletion works. Attribute based work is done in this thesis. Insert query and the select query was in use. In future, researchers may work on record based encryption or table based encryption on the database. As the database is encrypted, this is a security measure but more security related works can be added. Also, features for reports generation can be added which can be monthly, half yearly or yearly.