Chapter 1: Networking

1. Write a client program to send any string from its standard input to the server program. The server program reads the string, finds number of characters and digits and sends it back to client program. Use connection-oriented or connection-less communication.

2. Write a TCP or UDP client and server program to do the following:
   client> java client localhost/IP Port <enter>
   Enter text: This is my text to be changed by the SERVER <enter>
   Response from server: revres EHT YB DEGNAHC EB OT TXET YM SI SIHt
   client> exit

3. Write an UDP client and server program to do the following: Client send any string and server respond with its capital string.

4. Write a client server program using TCP where client sends two numbers and server responds with sum of them.

5. Write a TCP Client-Server program to get the Date & Time details from Server on the Client request.

6. Write a client-server program using TCP or UDP where the client sends 10 numbers and server responds with the numbers in sorted order.

Chapter 2: JDBC

1. Write code to insert three records into student table using PreparedStatement (assume student table with Name, RollNo, and Branch field).

2. Write a procedure to insert a row into the table student(roll_no,name,%ge) and call it using callable statement in JDBC application. ?

3. Write Java application program to change the basic = basic + 500 of all the employees whose age is greater than 40 from employee table then display how many record updated.

4. Write a program using JDBC for getting personal information – name, birthdate, sex, address, phone no, email-id & store it in database. Also provide list of all records, all male, all female & all minors (age below 18)

5. Write database application that prints different records from a table. Find out the name of table, no. of columns, no. of records and type of the columns.

6. Consider Bank table with attributes AccountNo,CustomerName, Balance, Phone and Address. Write a database application which allows insertion, updation and deletion of records in Bank table. Print values of all customers whose balance is greater than 20,000.

7. Write a JDBC program to insert and retrieve photo in database. (Hint: Use LongBlob datatype to store image in database)