

DATABASE MANAGEMENT SYSTEMS (KCS 551)

List of Experiments

| Exp. No. | Experiment Name | Course Outcome |
|-----------------------------|--|-----------------------|
| 1 | Write SQL queries for Data Definition Language. Create Table, Alter Table, Drop Table, Truncate | CO1 |
| 2 | Write SQL queries for Data Manipulation Language. Insert, Select, Update, Delete | CO1 |
| 3 | Write SQL queries to implement integrity constraints in the relations. | CO1 |
| 4 | a) Write SQL queries using arithmetic operators (=, <, >, etc) b) Write SQL queries using logical operators (AND, OR, BETWEEN, NOT, etc) | CO2 |
| 5 | Write SQL queries using built-in aggregate, scalar, numeric and string functions. | CO2 |
| 6 | a) Write SQL queries for extracting data from more than one table (use of joins) b) Write SQL queries using nested queries and SET operators. | CO3 |
| 7 | a) Write control structure programs in PL/SQL. b) Create procedure and function in PL/SQL. | CO4 |
| 8 | Create cursor in PL/SQL. Create triggers in PL/SQL. | CO4 |
| Value added Programs | | |
| 9. | Creating different types of index using SQL | CO1 |
| 10. | Create, rename, select, update & drop views in SQL. | CO1 |

Design and Analysis of Algorithm (KCS 552)

List of Experiments

| Exp. No. | Experiment Name | Course Outcome |
|-----------------------------|---|-----------------------|
| 1 | Write a program to implement Quick sort and Merge sort. | CO2 |
| 2 | Write a program to implement Selection sort and Insertion sort. | CO1 |
| 3 | Write a program to implement recursive Binary search and linear .search | CO2 |
| 4 | Write a program to implement heap sort. | CO1 |
| 5 | Write a program to implement Knapsack problem | CO4 |
| 6 | Write a program to implement traveling salesman problem | CO4 |
| 7 | Write a program to implement minimum cost spanning tree | CO3 |
| 8 | Write a program to implement N Queen problem | CO4 |
| Value added Programs | | |
| 9. | Write a program to implement graph traversal | CO3 |
| 10. | Write a program to implement subset sum problem | CO4 |

Principal of Programming Language (KCS-553)

List of Experiments

| Exp. No. | Experiment Name | Course Outcome |
|-----------------|--|-----------------------|
| 1 | a) Simple LISP queries. b) LISP queries to print, control structures (if then else) and defining a function. | CO1 |
| 2 | a) Define a LISP function to compute sum of squares. b) Define a LISP function to compute difference of squares. (if $x > y$ return $x^2 - y^2$, otherwise $y^2 - x^2$). | CO2 |
| 3 | a) Define a Recursive LISP function to compute Factorial of a given number. b) Define a LISP function to compute Fibonacci series. | CO2 |
| 4 | a) Define a LISP function which takes one argument as a list and returns last element of the list. (do not use last predicate) b) Define a LISP function which takes one argument as a list and returns a list except last element of the list. (do not use but last predicate) | CO3 |
| 5 | a) Define a Recursive LISP function which takes one argument as a list and returns reverse of the list. (do not use reverse predicate) b) Define a Recursive LISP function which takes two arguments first, an atom, second, a list, returns a list after removing first occurrence of that atom within the list. | CO3 |
| 6 | a) Define a LISP Function to check a number whether it is Prime or not. b) Define a LISP Function to check a number whether it is Armstrong or not. | CO3 |
| 7 | Define a LISP Function to calculate the Sum of Digits (eg. $123=6$). | CO3 |
| 8 | Define a LISP function check a Day using switch case. | CO3 |

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| 9 | Define a LISP function to design a calculator with basic operation using case statement. | CO3 |
| | Value added Programs | |
| 10 | a) Program for understanding impact of Rule Order and Goal Order in PROLOG Programminglanguages. b) Program for Cuts inPROLOG | CO4 |

Lab Incharge

Head(CSE)

Web Technology Lab (KCS 554)

List of Experiments

| Exp. No. | Experiment Name | Course Outcome |
|-----------------------------|--|-----------------------|
| 1 | Write HTML/Java scripts to display your CV in navigator, your Institute website, Department Website and Tutorial website for specific subject. | CO1 |
| 2 | Write an HTML program to design an entry form of student details and send it to store at database server like SQL, Oracle or MS Access. | CO1 |
| 3 | Write programs using Java script for Web Page to display browsers information. | CO1 |
| 4 | Write a Java applet to display the Application Program screen i.e. calculator and other. | CO1 |
| 5 | Writing program in XML for creation of DTD, which specifies set of rules. Create a style sheet in CSS/ XSL & display the document in internet explorer | CO2 |
| 6 | Program to illustrate JDBC connectivity. Program for maintaining database by sending queries. Design and implement a simple servlet book query with the help of JDBC & SQL. Create MS Access Database, Create on ODBC link, Compile & execute JAVA JDVC Socket. | CO3 |
| 7 | Install TOMCAT web server and APACHE. Access the above developed static web pages for books web site, using these servers by putting the web pages developed. | CO4 |
| 8 | Assume four users user1, user2, user3 and user4 having the passwords pwd1, pwd2, pwd3 and pwd4 respectively. Write a servlet for doing the following. Create a Cookie and add these four user id's and passwords to this Cookie. 2. Read the user id and passwords entered in the Login form and authenticate with the values available in the cookies. | CO4 |
| Value added Programs | | |
| 9. | Install a database (MySQL or Oracle). Create a table which should contain at least the following fields: name, password, email-id, phone number Write a java program/servlet/JSP to connect to that database and extract data from the tables and display them. Insert the details of the users who register with the web site, whenever a new user clicks the submit button in the registration page. | CO3 |
| 10. | Write a JSP which insert the details of the 3 or 4 users who register with the web site by using registration form. Authenticate the user when he submits the login form using the user name and password from the database | CO3 |

COMPUTER NETWORKS LAB (KCS-651)

List of Experiments

| Exp. No. | Experiment Name | Course Outcome |
|---------------------------|--|-----------------------|
| 1 | Running and using services / commands like ping, trace route, ns-lookup, ARP etc. (Verify the connectivity of your workstation to the internet.) | C01 |
| 2 | To study network CONNECTING DEVICES. | C01 |
| Write a C program: | | |
| 3 | a) For OSI model simulation. b) For ALOHA and Slotted ALOHA. | C01 |
| 4 | To count Even and Odd Parity. | C02 |
| 5 | a) For stuffing & De- stuffing of Bits. b) To implement Cyclic Redundancy Check (CRC). | C02 |
| 6 | To implement RSA Algorithm (Encryption and Decryption). | C04 |
| 7 | For Leaky Bucket and Token Bucket. | C01 |
| | Value added Programs | |
| 8 | To analyze the packet transmission in the network by using Wireshark. | C03 |
| 9 | Implementation of Socket programming using UDP and TCP. | C03 |
| 10 | To build a network and analyzing the packet transmission by using packet tracer. | C03 |



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COMPILER DESIGN (KCS-652)

List of Experiments

| Exp. No. | Experiment Name | Course Outcome |
|-----------------------------|--|----------------|
| 1 | Removing BLANK SPACE and NEWLINE form a file using File handling | CO1 |
| 2 | Implementation of LEXICAL ANALYZER for IF STATEMENT | CO1 |
| 3 | Implementation of LEXICAL ANALYZER for ARITHMETIC EXPRESSION | CO1 |
| 4 | Construction of DFA from REGULAR EXPRESSION | CO2 |
| 5 | Write a program to remove left recursion from the given grammar. | CO3 |
| 6 | Write a program to perform left factor for the given grammar. | CO3 |
| 7 | Write a program to compute first of non-terminals. | CO3 |
| 8 | Write a program to Implement SHIFT REDUCE PARSING ALGORITHM | CO3 |
| Value added Programs | | |
| 9. | Write a program to Implement RECURSIVE DESCENT PARSER | CO3 |
| 10. | Write a program to Implement OPERATOR PRECEDENCE PARSER | CO3 |

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Head(CSE)

COMPUTER GRAPHICS LAB (KCS-653)

List of Experiments

| Exp. No. | Experiment Name | Course Outcome |
|-----------------------------|--|-----------------------|
| 1 | WAP to draw a pixel and line in C. | CO1 |
| 2 | WAP to draw a circle and hut in C. | CO1 |
| 3 | WAP to draw a line using DDA algorithm. | CO1 |
| 4 | (a)WAP to draw a line using Bresenham's line drawing algorithm. (b) WAP to draw a circle using midpoint circle drawing algorithm. | CO1 |
| 5 | WAP to Scale and Translate an object in 2D. | CO2 |
| 6 | WAP to Reflect and rotate an object in 2D. | CO2 |
| 7 | (a)Write a program to implement Cohen Sutherland line clipping algorithm. (b)WAP to implement Sutherland Hodgeman polygon clipping algorithm. | CO3 |
| 8 | WAP to draw a pie chart and bar chart. | CO2 |
| Value added Programs | | |
| 9. | WAP to display moving car. | CO4 |
| 10. | WAP to display moving flying kite. | CO4 |

DATA WAREHOUSING AND DATA MINING (KCS 654)

List of Experiments

| Exp. No. | Experiment Name | Course Outcome |
|-----------------------------|---|-----------------------|
| 1 | a) Introduction to WEKA tool. b) Demonstrating the use of Explorer tab using .arff file. | CO3 |
| 2 | a) Introduction to arff file format and creating a dataset in arff file format. b) Introduction to csv file format and creating a dataset in csv file format. | CO3 |
| 3 | a) Apply pre-processing technique to the training data set. b) Normalize Iris Table data using Knowledge Flow. | CO2 |
| 4 | Exploring the experimenter and CLI tab of WEKA tool. | CO3 |
| 5 | a) Demonstration of classification rule process on WEKA data-set using j48 algorithm. b) Demonstration of classification rule process on WEKA data-set using Naïve Bayes algorithm. | CO4 |
| 6 | a) Write a Program of Aprori Algorithm using any programming language. b) Demonstration of Association rule process on data-set contact c) Demonstration of Association rule process on dataset test.arff using apriori Algorithm | CO4 |
| 7 | Demonstration of classification rule process on dataset employee.arff using id3 algorithm | CO4 |
| 8 | Demonstration of clustering rule process on data-set iris.arff using simple k-means | CO4 |
| Value added Programs | | |
| 9. | a) Creation of a DataWare House. b) Creating an OLAP cube c) Implementation different OLAP operations on cube. | CO1 |
| 10. | a) Implementation of varying array b) Implementation of Nested Table. | CO2 |

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