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| G 10CS6212OPERATING SYSTEMS AND DATABASE MANAGEMENT SYSTEMS LAB |
| Lab Cycle I |
| 1. Shell script program to check whether given file is a directory or not. 2. Shell script program to count number of files in a Directory. 3. Shell script program to copy contents of one file to another. 4. Create directory, write contents on that and Copy to a suitable location in your home directory. 5. Use a pipeline and command substitution to set the length of a line in file to a variable. 6. Write a program using sed command to print duplicated lines of Input. 7. Process creation using fork, exec commands 8. Process creation using getpid, sleep, exec, wait commands 9. Apache Hadoop Installation and Configuration 10. Map Reduce Programming in Apache Hadoop 11. Familiarization of Hadoop Ecosystem 12. Familiarization with virtualization tools |
| Lab Cycle II |
| 1. Query analysis using EXPLAIN in MySQL. Create a table student with following data. Perform below query and display results.   i. Select studentNo,studentName,cProgramming from student where studentNo =’101’.  ii. Use EXPLAIN statement to analyze your query.  iii. Based on the results, make a decision to add an index to the 'customer\_id'  iv. Run EXPLAIN statement to note down the changes   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | student | | | | | | | | | studentNo | studentName | maths | physics | chemistry | cProgramming | department | address | | 100 | Hari | 50 | 60 | 45 | 75 | CSE | Kasaragod | | 101 | Devi | 60 | 55 | 78 | 40 | CSE | Kasaragod | | 102 | Sam | 45 | 77 | 88 | 45 | IT | Kannur | | 103 | SreeHari | 90 | 75 | 77 | 60 | IT | Calicut | | 104 | Rani | 91 | 98 | 89 | 52 | ECE | Kannur | | 105 | Raj | 88 | 77 | 67 | 48 | CSE | Palakkad |   C   1. Create a table cust\_details with following data (TYPE=InnoDB). Perform InnoDB Transactions with following actions 2. ROLLBACK 3. COMMIT 4. AUTOCOMMIT  |  |  |  |  |  | | --- | --- | --- | --- | --- | | cust\_details | | | | | | acc\_no | acc\_type | name | address | balance | | 1001 | saving | sujith | kasaragod | 20000 | | 1002 | saving | sam | kannur | 30000 | | 1003 | current | sree | calicut | 40000 | | 2001 | loan | loan of sam | kannur | 0 | | 2002 | loan | loan of sujith | kasaragod | 0 |  1. Using the XML Document below, with the URI “bib.xml” (library with books), define the following queries in XQuery:   a.) Give the titles of all Books sorted by Price.  b.) How many books were written by Abiteboul?  c.) Give for each author, the number of books he has written.    <?xml version="1.0"?>  <bib>  <book year="1994">  <title>TCP/IP Illustrated</title>  <author>Stevens</author>  <publisher>Addison-Wesley</publisher>  <price>65.95</price>  </book>  <book year="1994">  <title>Principles of Databases</title>  <author>Abiteboul</author>  <publisher>Addison-Wesley</publisher>  <price>35.89</price>  </book>  <book year="1992">  <title>Advanced Programming in the Unix environment</title>  <author>Stevens</author>  <publisher>Addison-Wesley</publisher>  <price>65.95</price> </book>  <book year="2000">  <title>Data on the Web</title>  <author>Abiteboul</author>  <author>Buneman</author>  <author>Suciu</author>  <publisher>Morgan Kaufmann Publishers</publisher>  <price> 39.95</price> </book>  <book year="1992">  <title>The Economics of Technology and Content for Digital TV</title>  <editor>  Gerbarg  <affiliation>CITI</affiliation>  </editor>  <publisher>Kluwer Academic Publishers</publisher>  <price>129.95</price>  </book>  </bib> |