**5 years Integrated M.Sc. (IT) (Semester - 4)**

**Practical List-060010410: CC12-Linux and Shell Programming**

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| **Practical No : 1** | **Enrollment No:** |
| **Practical Problems** | 1. Write a command to display your login id. 2. Write a command to display time in given format:   Today’s time is HH:MM.   1. Write a command to display date in dd/mm/yyyy format. 2. Write a command to display following message using date command.   Today's date is: 03/12/19. Current time is: 14:50   1. Write a command to display day of the year. 2. Write command to display today’s week day as given below:   Happy Monday   1. Display calendar of current month. 2. Write a command to display week of the year. 3. Write command to display calendar of year 2019. 4. Write command to display who’s online. 5. Write output of who –uH and describe its content. 6. Write a command to get help on cat command. 7. Write a command to display terminal name. 8. Write a command to record session to file myhistory. 9. Write bc commands to perform basic arithmetic operation on floating point numbers with output. 10. Write a command to display operating system and version information. |
| **Objective(s)** | * Students will be practice basic commands. |
| **Duration for completion** | 3 hours |
| **PEO(s) to be achieved** | **PEO1**: To provide sound foundation in the fundamentals of computer application along with analytical, problem-solving, design and communication skill for life-long learning in chosen field.  **PEO2**: To provide quality practical skill of tools and technologies to solve industry problems. |
| **PO(s) to be achieved** | **PO6**: Ability to use the techniques, skills and modern tools as necessary for software development. |
| **CO(s) to be achieved** | **CO1**: Study of LINUX/UNIX environment and its need.  **CO2**: Understand and use utilities to work with LINUX/UNIX environment. |
| **Solution must contain** | Command, output and interpretation |
| **Nature of submission** | Handwritten |
| **Reference for solving the problem** | Book:  i. Forouzan B. A., Gilberg R. R., UNIX and Shell Programming, Thomson  ii. Das S., UNIX aoncepts and Applications, McGraw Hill |
| **Post laboratory questions** | Write syntax of common command format. |
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| |  |  |  | | --- | --- | --- | | **Objectives** | **Solution achieves the desire the desired objective(s)** | **Signature** | | **To be able to use basic commands** |  |  | | **To be able to use wildcard** |  |  | | **To be able to perform basic operations on directory and files** |  |  | | |
| **Practical No : 2** | **Enrollment No:** |
| **Practical Problems** | Create below given directory structure in your home directory and perform following commands. While performing each of the command must execute ls and pwd command to check output:   1. Move into work directory. 2. Move to application directory. 3. Move to parent directory. 4. Move to java directory. 5. Move to data directory. 6. Move to your home directory. 7. Move to program directory and create text file say friendslist. 8. Copy friendslist file to application directory. 9. Copy friendslist file to program directory with name person.txt. 10. Copy data directory to program directory. 11. Move to work directory and show output of ls –R command. 12. Remove application directory. 13. Create application/code/data directory structure under csharp directory using single command. 14. Move to program directory. 15. Copy person.txt file to namelist file. 16. Execute ls –l command and write output. 17. Rename namelist to names.txt. 18. Create a file with name .mydata which contains your information. 19. List files such that it shows .mydata file. 20. List files in such a way that newest file come first. 21. Move to work directory. Delete java and csharp directory. 22. Move to home directory and execute ls command with option –a, -A, -d, -R, -r, -ld, -lt, -p, -1, -i, and -li |
| **Objective(s)** | Student should be able to work with file system commands. |
| **Duration for completion** | 2 hours |
| **PEO(s) to be achieved** | **PEO1**: To provide sound foundation in the fundamentals of computer application along with analytical, problem-solving, design and communication skill for life-long learning in chosen field.  **PEO2**: To provide quality practical skill of tools and technologies to solve industry problems. |
| **PO(s) to be achieved** | **PO6**: Ability to use the techniques, skills and modern tools as necessary for software development. |
| **CO(s) to be achieved** | **CO1**: Study of LINUX/UNIX environment and its need.  **CO2**: Understand and use utilities to work with LINUX/UNIX environment. |
| **Solution must contain** | Command, output and interpretation |
| **Nature of submission** | Handwritten |
| **Reference for solving the problem** | Book:  i. Forouzan B. A., Gilberg R. R., UNIX and Shell Programming, Thomson  ii. Das S., UNIX aoncepts and Applications, McGraw Hill |
| **Post laboratory questions** | 1. List out command used in this practical with its syntax. 2. List out three error message that you encounter. 3. What is precondition for deleting directory? 4. Write any six options and its purpose of ls command. 5. What is absolute path and relative path? |
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| |  |  |  | | --- | --- | --- | | **Objectives** | **Solution achieves the desire the desired objective(s)** | **Signature** | | **To be able to use basic commands** |  |  | | **To be able to use wildcard** |  |  | | **To be able to perform basic operations on directory and files** |  |  | | |