



Assignment

Subject: Cloud Computing

Task: Task Automation

Due Date: **22 Feb 2023**

Marks: 20

Guidelines for the submission of assignment.

You must have to follow these guidelines for the submission of assignment.

1. You **must present your running work** to me and **defend your viva**. The last day to present your assignment is **Date 22, Feb 2023 for section B and Date 23, Feb 2023 for section B**.
2. **You must read** the academic dishonesty topic in the introductory lecture before starting assignment.
3. No queries regarding the **due date** and **Late submission** will not be marked.
4. Creativity and efficient programming will result in bonus marks.
5. The assignment is targeted at the **CLO - 2 (Course Learning Outcome)** and will be graded as **rubric** provided on page 2.



ASSESSMENT RUBRIC

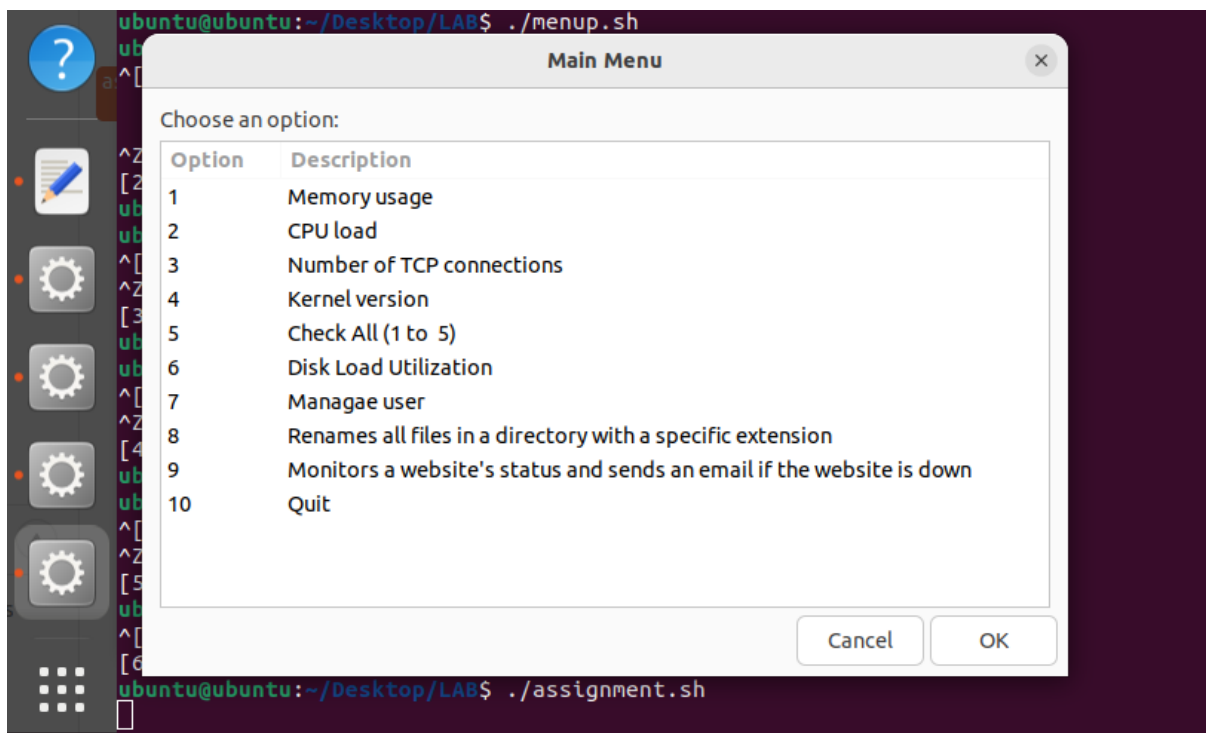
| | Unsatisfactory 0 | Satisfactory 1 | Good 2 | Excellent 3 |
|---------------------------|--|--|---|---|
| Delivery | Completed < 50% of the work or undelivered on time | Completed between 50-70% of the work. On time | Completed between 70-90% of the work. On time | Completed 100% of the work. On time |
| Document Standards | Poor use of space (indentation, blank lines). Disorganized and messy | White space makes program easy to read. Organized work. | Good use of white space. Organized work. | Excellent use of white space. Creatively organized work. |
| Runtime x 2 | Does not execute due to errors. User prompts are misleading or non-existent. | Executes without errors. User prompts contain little information, poor design. | Executes without errors. User prompts are understandable, minimum use of spacing in output. | Executes without errors excellent user prompts, good use of symbols, spacing in output. |
| Efficiency | A difficult and inefficient solution. | A logical solution that is easy to follow but it is not the most efficient. | Solution is efficient and easy to follow (i.e. no confusing tricks). | Solution is efficient, easy to understand, and maintain. |
| Design | Appearance not at all consistent with design requirements. | Appearance is fine but a little inconsistent with design requirements. | Appearance is consistent with the design requirements. | Appearance is pleasing to the and provides good user experience. |



Questions

There are several ways to automate processes through scripting in Linux. Explore all methods and prepare a brief report.

After that, create a complete multitask automation menu script using zenity and any task automation scripts (bash, cron, ansible, shell etc.). By selecting the option from the main menu corresponding task should be accomplished.



Main Menu

- 1) Memory usage
- 2) CPU load
- 3) Number of TCP connections
- 4) Kernel version
- 5) Check All (1 to 5)
- 6) Disk Load Utilization
- 7) Manage all user: Manage user, will display another multi option list for i) create user ii) delete user, and iii) set password iv) reset password etc



- 8) Renames all files in a directory with a specific extension
- 9) Monitors a website's status and sends an email if the website is down
- 10) Exit

Main menu should keep popping until user selects option 10 (exit). Your report must include all source code with output.

Good Luck 😊