

CSE 4502 – OS Lab

Topic: Shell Script

Marks: 25

- a. Write a shell script that does the following:
 - i. Takes in an array of numbers as a parameter to the script.
 - ii. Separates the prime numbers from the non-primes.
 - iii. Prints out the prime and the non-prime numbers in a sorted manner using Quick-sort.
 - b. Write another shell script that does the exact same thing as the shell script in “a” but input to the shell script will be an array of years and you are to separate out the leap years from the normal ones.
- **Special Cases:**
 - i. If the array (passed as a parameter) contains anything other than numbers and spaces, your script should raise an error and ask for a new list of numbers during run-time. This error should be handled until an array containing only numbers are passed.
 - ii. If no array is passed, your script should raise an error and ask for a new list of numbers during run-time.
 - **Submission Guidelines:**
 - i. Submit your shell scripts as “**Prime_Shell_ID.sh**” and “**Leap_Shell_ID.sh**” for tasks **a** and **b**, respectively separately and not in a “**.zip**” file.
 - ii. Submit the following screenshots-
 - a. Screenshot of the shell script.
 - b. Screenshot of a successful operation.
 - c. Screenshot of an execution considering “**Special Case – i**”
 - d. Screenshot of an execution considering “**Special Case – ii**”.
 - iii. Other than uploading the shell scripts, you have to submit a separate documentation combining the code and the screenshots corresponding to the tasks in a “**.docx**” file. Do not submit “**.zip**” files.