

Khaula Molapo

Operating System wk 2

Year 2 semester 2

Question 1

When a computer is running slow, Task Manager and Command Prompt can help fix the problem. Open Task Manager using Ctrl + Shift + Esc to view CPU, memory, disk, and network usage. Identify programs that are using a lot of resources as they can make the computer slow. You can close these programs directly in Task Manager or note their names for command-line actions. In Command Prompt, the `tasklist` command shows all running programs. `taskkill /PID [process ID]` ends a specific program by its process ID. `sfc /scannow` scans and repairs damaged system files that may affect performance. Using Task Manager and Command Prompt together helps stop unresponsive programs and improve speed. Regularly checking resource usage and using these commands ensures the system runs smoothly and efficiently. This method is simple for beginners and prevents slowdowns caused by heavy applications or errors.

Question 2

The `task kill` command closes running programs in Windows through Command Prompt. You can use `task kill /PID [process ID]` to terminate a program by its ID or `task kill /IM [program name]` to close it by name. Adding `/F` forces the program to close if it is not responding, and `/T` also stops any child processes started by it. This command is useful for frozen programs or those consuming too much CPU or memory. It can be used in scripts to automatically manage programs. Using `task kill` helps maintain system performance and prevents slowdowns. This command is easy to use and very helpful for managing running applications effectively.

Question 3

In Ubuntu, simple commands help manage files and monitor processes. `mkdir` creates a new folder, which helps organize files neatly. `ls` lists all files and folders in the current directory, allowing you to see what is inside. `ps` displays all running programs and their process IDs, showing what is active. These commands allow users to manage files and check system activity without relying on graphical tools. They are easy for beginners to learn. Practicing `mkdir`,

`ls`, and `ps` improves control over the system, helps keep files organized, and ensures the user can monitor running programs efficiently.

Question 4

Task Manager shows CPU and memory usage for all programs. High CPU usage means a program is using a lot of processing power, which can slow down the computer. High memory usage occurs when multiple programs run simultaneously, which may reduce performance. Idle programs use minimal resources, keeping the system fast. By observing Task Manager, you can see which programs are consuming the most CPU or memory and close unnecessary ones. This helps improve speed and prevents freezing or lag. Regular monitoring ensures the computer runs smoothly, supports multitasking, and helps users understand how resources are used efficiently.