**Systems Admin / DevOps Engineer Test (Internship)**

1. **Mobile:** The client is unable to receive his company Email on his Mobile phone.

**SOLUTION:**

* + - 1. Check that the client is using the correct email address (including the correct domain email address) and password.
      2. Check the settings to ensure that the correct server ports numbers for IMAP and POP3 are used
      3. Check that the correct mail server name is used.

1. **Network:** A User’s laptop is unable to connect to the company Network.

**SOLUTION:**

* + - 1. If connection is via an Ethernet cable, check that the cable is not “open” in any place, and that all physical connections are intact.
      2. Check Internet settings that all ports are configured rightly
      3. Check the login details (username and password) that it is correct. Where connection is via Wifi
      4. Check that LAN Card is still functional from Control Panel - Device Manager

1. **Office:** Microsoft Office is not starting. You have reinstalled and it is still not coming up.

**SOLUTION:**

* + - 1. Completely uninstall and REMOVE every trace of the previous Microsoft Office. Then reinstall again.

1. **Virus:** You discover that a User’s system has been attacked by a Virus.

**SOLUTION:**

* + - 1. Install an antivirus software, and run a scan.
      2. Back up important files and documents, should a system wipe be necessary.

1. **Excel:** A user complains that he is seeing “ #########  “  in a lot of his Excel Cells. He wants a fix.

**SOLUTION:**

* + - 1. Hold down 'ctrl' then press 'A' (twice), then double-click the right edge of any column header

1. **Router:** There was a fault with the Router and a new Linksys router has just been given to you to install.

**SOLUTION:**

Step 1: Connect the Cable modem to the router’s WAN or Internet port.

Step 2: Connect a computer to any of the router's numbered ports using an Ethernet cable

Step 3: After the connection, check for the lights on the front panel of the router and confirm that the lights corresponding to the ports where the Ethernet cables are connected to are lit.

Step 4: Configuring the Linksys router for Cable Internet connection by entering 192.168.1.1 into the web browser's address bar of the connected device

Step 5: Enter in the username (which will be blank) and password ( which will be ‘admin’)

Step 6: Click **MAC Address Clone** in the set up tab, Click **Enabled**, and the click on **Clone My PC's MAC**

Step 7: Upon enabling MAC Address Clone feature, Internet status should be active, if not further troubleshooting will proceed

1. **Windows Server:** The computer with Windows 2000 Server installed was used as a file server for a long period of time. You have noticed that the system performance has decreased and the file operation time has increased. You suspect that one of the possible causes of the system performance decrease is a disk fragmentation. What action will you take to find out if the disk is fragmented?

**SOLUTION:**

Step 1: Open Disk Defragmenter by clicking the Start menu, choosing Programs, then Accessories, then System Tools, and finally Disk Defragmenter

Step 2: Under Current status, select the disk to be defragmented

Step 3: click on Analyze disk to determine if the disk needs to be defragmented or not

Step 4: Click on Defragment disk

1. **File Integrity:** Your team member has accidentally deleted a lot of files on a User’s Hard Disk. There are no Back ups for these files. The client is asking for those files as a matter of Urgency. You are the only one on ground. How would you solve this?

**SOLUTION:**

Step 1: Check recycle bin folder to be sure it’s not been complete deleted, and if not, restore from there

Step 2: If the file is not in recycle bin, then install a “file recovery tool” software e.g. ‘Recuva’, and attempt to recover the deleted files.

1. **Unix / Linux:** List 10 Linux Commands you are familiar with and what they do.

**SOLUTION:**

a. pwd: to find out the path of the current working directory (folder) one is in

b. cd: to navigate through the Linux files and directories

c. ls: used to view the contents of a directory

d. cp: used to copy files from the current directory to a different directory

e. mv: used to move files, and can also be used to rename files

1. **New Computer:** Highlight5 issues to watch out for in setting up a new computer for a new user.

**SOLUTION:**

* + - 1. Ensure that all peripheral devices e.g keyboard and mouse are well connected and operating well
      2. Ensure that the right operating system is installed
      3. Check and make sure an antivirus is installed
      4. Check that system updates can be received and installed
      5. Make sure the computer is set up in a safe environment.

1. **Current Affairs in Tech:** Briefly state  who the following are and what they do/did:
   1. Elon Musk        b.   Michael Dell c.  Paul Allen      d.    Steve Wozniak     e. Sim Shagaya

**SOLUTION:**

* + - 1. Elon Musk: Born 28 June 1971 in Pretoria, South Africa. He is an entrepreneur and business magnate. He is the founder, CEO, and Chief Engineer at SpaceX, the CEO, and Product Architect of Tesla, Inc.; founder of The Boring Company; and co-founder of Neuralink and OpenAI.
      2. Michael Dell: Born February 23, 1965 in Houston, Texas, United States. He is a businessman, an author, and known as the founder and CEO of Dell Inc., one of the world’s leading sellers of personal computers (PCs)
      3. Paul Allen: Born on January 21, 1953 in Seattle, Washington, United States. He was a business magnate, computer programmer, researcher, investor, and philanthropist. He co-founded Microsoft Corporation with childhood friend Bill Gates in 1975, which helped spark the microcomputer revolution of the 1970s and 1980s. Died on October 15, 2018.
      4. Steve Wozniak: Born 11 August 1950 in San Jose, California, United States. He is an electronics engineer, computer programmer, philanthropist, and technology entrepreneur. In 1976, with business partner Steve Jobs, he co-founded Apple Inc., which later became the world's largest information technology company by revenue and the largest company in the world by market capitalization. Through his work at Apple in the 1970s and 1980s, he is widely recognized as one of the prominent pioneers of the personal-computer revolution.
      5. Sim Shagaya: Born in 1976. is a media and technology entrepreneur from Nigeria. He is the founder and CEO of uLesson Education Limited - an app built to make education available to learners across Africa. He is the founder and former C.E.O Konga.com and founder of E-Motion Advertising - a leading out-of-home media company acquired in 2019 by Loadstad Media.