Module 4: Troubleshooting and Helpdesk

Topic: Troubleshoot security

- ## Assignment level Basic:

  1. What is troubleshooting?

     Troubleshooting is a form of problem solving, often applied to repair failed products or processes on a machine or a system. It is a logical, systematic search for the source of a problem in order to solve it, and make the product or process operational again.
  2. what is the need of troubleshooting security?
     Troubleshooting is needed to identify the symptoms. Determining the most likely cause is a process of elimination—eliminating potential causes of a problem. Finally, troubleshooting requires confirmation that the solution restores the product or process to its working state.

- ## Assignment level Intermediate:

  1. Do a practical to change the password.

     Yes
  2. Do a practical to change the user account password.
     Yes

- ## Assignment level advance:

  1. How do you troubleshoot a computer?
  2. How to troubleshoot common computer problems?

     1. Turn it off, and then turn it on again. Shutting down and restarting your computer resets programs and processes that may have been experiencing .

     2. If you don't know something, ask!

     3. Start with simple fixes, and then rule out possibilities from there.

     4. Check your device connections.
     5. Boot your computer in Safe Mode
  3. Your computer turns on, but still doesn't work?
  4. You get the blue screen of death?
     Blue screens are generally caused by problems with your computer's hardware or issues with its hardware driver software. Sometimes, they can be caused by issues with low-level software running in the Windows kernel. Regular apps usually won't be able to cause blue screens.

Topic: OS Troubleshooting

- ## Assignment level Basic:

  1. What are the basic of troubleshooting?

     Troubleshooting is a form of problem solving, often applied to repair failed products or processes on a machine or a system. It is a logical, systematic search for the source of a problem in order to solve it, and make the product or process operational again. Troubleshooting is needed to identify the symptoms.

  2. Write down the steps of os troubleshooting.
     Restart system. Whatever is ailing your system might be fixed by restarting it.
     Run troubleshooter. Things break and on Windows 10, they tend to break often.
     Edit start up items. A startup item can often be the cause of a problem.
     Disconnect hardware. Hardware can cause trouble on any system and often, there aren't many indications as to when hardware is failing.
     Check/Update drivers. Windows 10 likes to update drivers. The latest version of the OS gives users more control over how the updates are installed but that doesn't mean you'll never .
     Bonus item: Run sfc scan. Running a system file scan is often considered a basic troubleshooting step. ...

- ## Assignments level Advance:

  1. Do a practical to repair OS.

     Yes

  2. Do a practical to repair boot file.
     Yes

  3. DO a practical to repair bootmgr.
     Yes

- ## Topic: Recovery Assignment level Basic:

  1. What is recovery?

     This section looks at what it means to recover from a mental illness. Recovery means different things to different people. We focus on personal recovery and suggest different ways that you can help your own recovery. Also, we know that often people need support to recover. We hope that this information will help you to work out what recovery means to you, and help you find ways in which you can focus on your recovery. If your loved one has a mental illness, you may find this section helpful too.

  2. Why do we need recovery?
     Recovery allows the body to replenish energy stores and repair damaged tissues.Without sufficient time to repair and replenish, the body will continue to break down from intensive exercise.

- ## Assignment level Intermediate:

1. list out the tools for recovery.
   1. PDFBear
   2. Wondershare Recoverit Application
   3. Recuva Application
   4. System Mechanic Ultimate Defense Application
   5. Easeus Application
   6. Puran File Recovery Application
   7. Wise Data Recovery Application
   8. PhotoRec Recovery Application
   9. Undelete 360 Application
   10. PC Inspector File Recovery Application
2. DO a practical to recover deleted file.
   Yes
3. Do a practical to recover the formatted file
   Yes
4. Do practical to recover data from the os Corrupted file.
   Yes

Topic: Hard Drive troubleshooting

- ## Assignment level Basic:

  1. What is Hard troubleshooting?

     Hardware troubleshooting is the process of reviewing, diagnosing and identifying operational or technical problems within a hardware device or equipment. It aims to resolve physical and/or logical problems and issues within a computing hardware. Hardware troubleshooting is done by hardware or technical support technician.
  2. Why do we need Hard drive troubleshooting
     1. Firmware or Manufacturer Faults
     2. Electronic Failure or Power Surge
     3. Overheating
     4. Mechanical or Internal Failure
     5. Corrupt File
     6. Human Errors

- ## Assignment level Intermediate:

  1. Do a practical to troubleshoot the digging sound.

     Yes

  2. Do a practical to change the sata cable in harddrive.

     Yes

Topic: Laptop, Printer, Video card Troubleshooting

- ## Assignments level Baic

  1. What is the basic troubleshooting for printer?

     Check printer-ready state Inspect your printer; it will normally have a light that indicates it is ready to receive a...

     Inspect printer cables Make sure the printer's cables are connected securely. Inspect them for damage e.g., a frayed...

     Check printer On/Off switch Some printers have a physical On/Off switch. It should normally be located near where the...

     Clean the printer Use a soft cloth to clean the printer. For hard to reach places, try using a hairdryer on low...

     Change USB port

  2. What are the basic troubleshooting for laptop?

- Check to ensure that the laptop is plugged in.

- Check to ensure that the battery is properly installed.

- Try removing the battery to run the laptop from just the AC power. If it works, you may have a defective battery that needs replacing.

- If you have a second battery, use it instead.

- Check the power brick on the AC cord. Is it the right adapter for your laptop? Other portable devices may have similar-looking adapters, but unless they match the volts and amps for your laptop, the laptop doesn't work. (Not that this has ever happened to me.)

- Volts and Amps would be great team names. Imagine them playing each other. It would be electric.

- When the laptop's power lamp is on, it shows that the laptop has some life. It means that the laptop's hardware is recognizing that it has power. The problem could then lie with the laptop's hardware, not with the power supply.

- When your laptop has separate lamps for the AC power and battery, you can check both. If the AC lamp lights but the battery doesn't, it's a battery issue. When the battery lamp is lit but the AC lamp remains dark, the AC power brick might be dead or the AC power from the wall might be messed up or you might have a connection issue.

- If you consider yourself to be technically proficient, you can try testing some hardware. For example, if the laptop has removable disk drives, check to ensure that they're properly connected: With the laptop's power off, take out the drives and put them back in again. Ditto for the PC's memory card: Turn off the laptop, remove the memory, and then put the memory back.

- Laptops don't start when they're broken. I'm not being flip, either: Laptop hardware can fail. Failed electronics are covered by most laptop warranties. You need to get support by contacting the laptop manufacturer.

- Press the Caps Lock key. If you have power, the Caps Lock lamp on the laptop will blink on and off as you press the key. If so, the problem could be the display.

- Check the laptop display's brightness settings. If the brightness level is turned down too much, the screen will be dark, especially in a bright room or in direct sunlight. Try turning up the brightness all the way to see whether the screen glows.

- Plug an external monitor into the laptop's monitor port. If the external monitor works, the problem is with the laptop's display only, not with the laptop's display adapter or other internal hardware. Because the laptop and monitor are the same thing, fixing the monitor (or the display adapter) involves replacing major laptop components. You must return the laptop to the dealer for repair.

- ## Assignments level Intermediate:

  1. Do a practical to disassemble the laptop and change the corrupted ram.

     Yes

  2. Do a practical to change the cartridge of the printer.

     Yes

  3. Do a practical to change the processor fan.

     Yes

  4. Do a practical to check the laptop which is not starting up

     Yes