Installing Windows 10 Educational Edition Using Virtual Machine Using VMWare

OSYS 1200/3289 – Introduction to Windows Administration
By: Ayah Habboush, W0476041
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Introduction

This is assignment 1 where we will get an introduction to VMWare, create a Virtual Machine (VM) using the VMWare application. Instal Windows 10 Educational Edition. Activate the VM using the Key Management Service (KMS) method volume licensing. Configuring the VM by Installing APPs, set time, date and time zone. Creating a scheduled task using Task Scheduler. Create a shortcut of the Microsoft Management Console (MMC) and customize it, then secure it. Finally, create a snap and back up a Gold Copy of the current state of the VM.

Task 2: Creating your first virtual machine

I have created my Virtual Machine using VMware Workstation 17 pro following the steps provided in the assignment document. My VM is named AHabboush-CL01 (Image 1). It has 1 processor, 1 core processor, 3 hard drives and 8GB of RAM. Windows 10 Educational Edition is installed on the device, and has 3 hard disks 150GB, 10GB and 20GB.
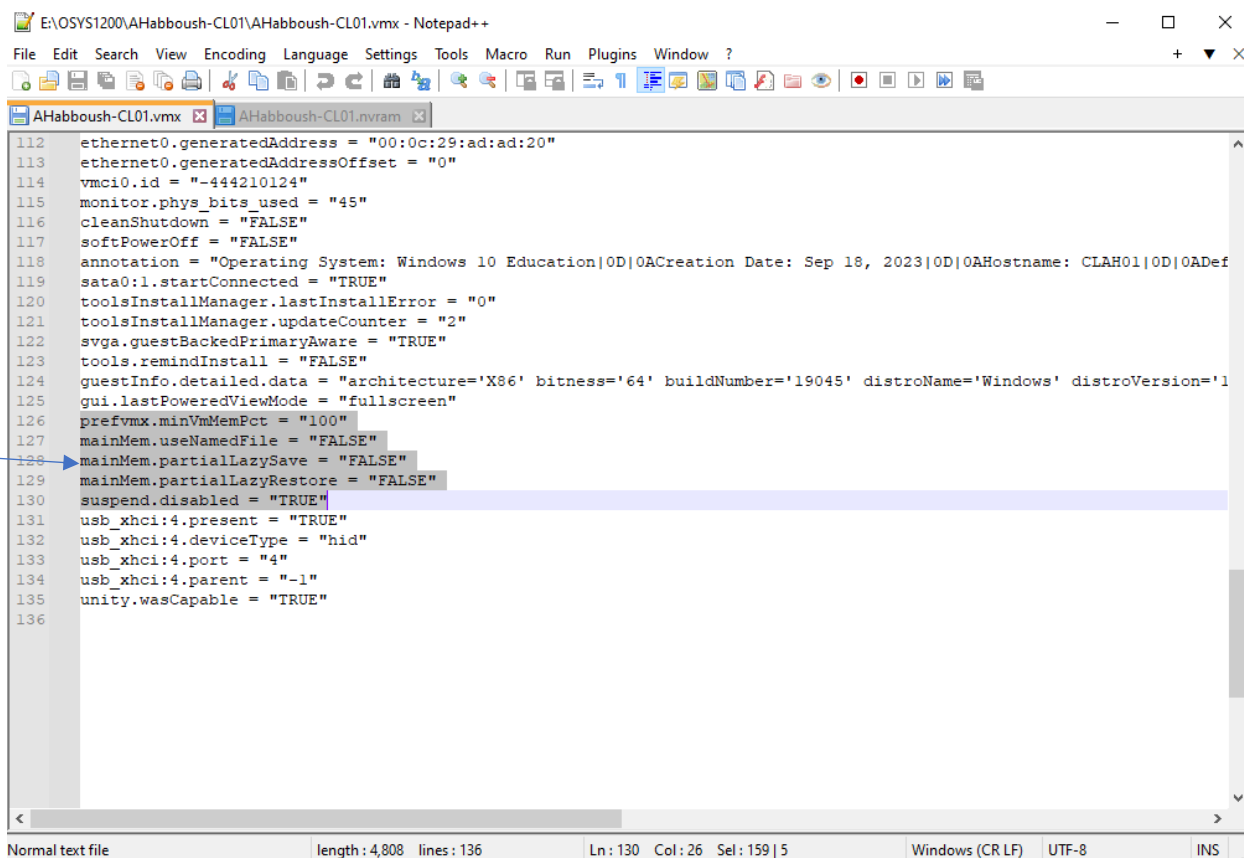

Image 1: A screenshot of my VM in the off state, showing all the device's hardware and specifications (1) along with the Virtual Machine's description (2). Name of the Virtual Machine (3).

Task 3: Install our first Windows Operating System

My machine was renamed to <u>CLAH01</u>, and the Workgroup is modified as <u>OSYS</u>. It's found under Settings→About→Advanced Systems Settings→Under rename this computer→Change. You will be able to change the Computer Name and Domain (Image 2). Time zone and location of my VM is set up to the Atlantic Time, Canada as shown in (Image 2) with the current time and date. I have added the VMX live file to the machine found in (Image 3). A conformation of workstation's activation is found in (Image 4). A complete description of my VM using the setting and the about to show the full details of mu device(Image 5).
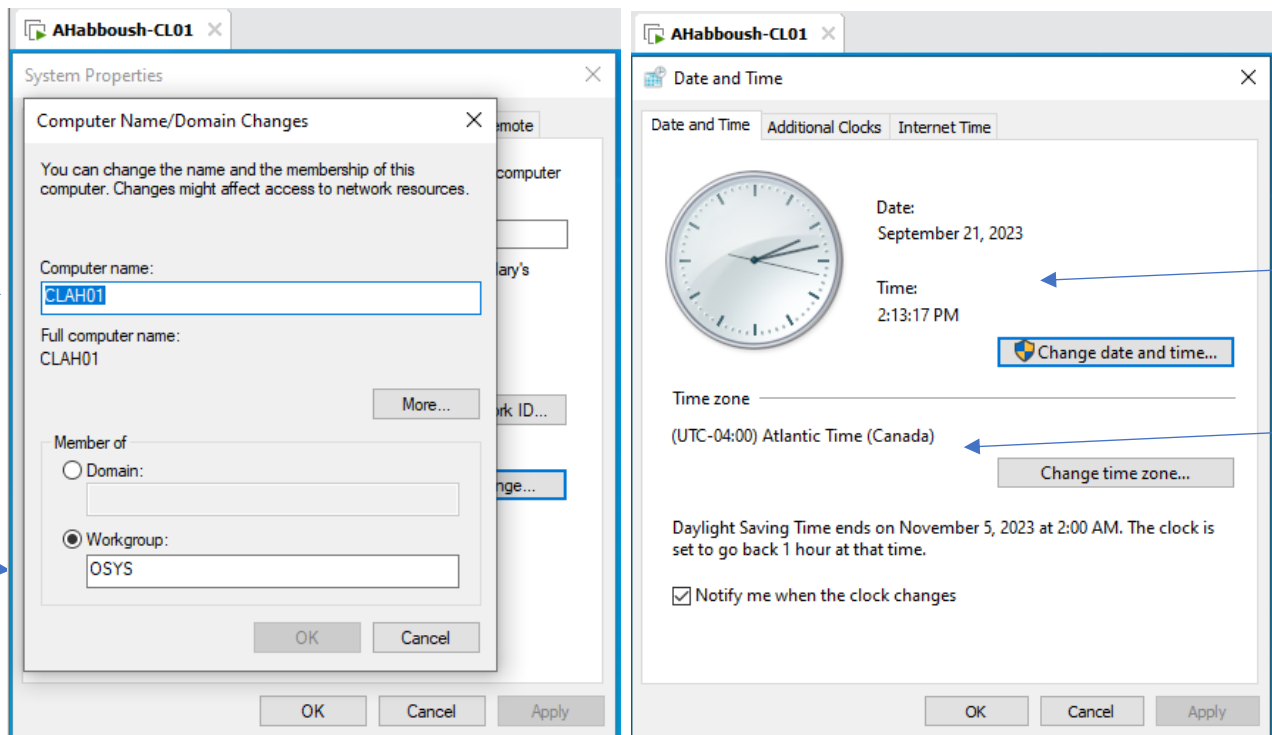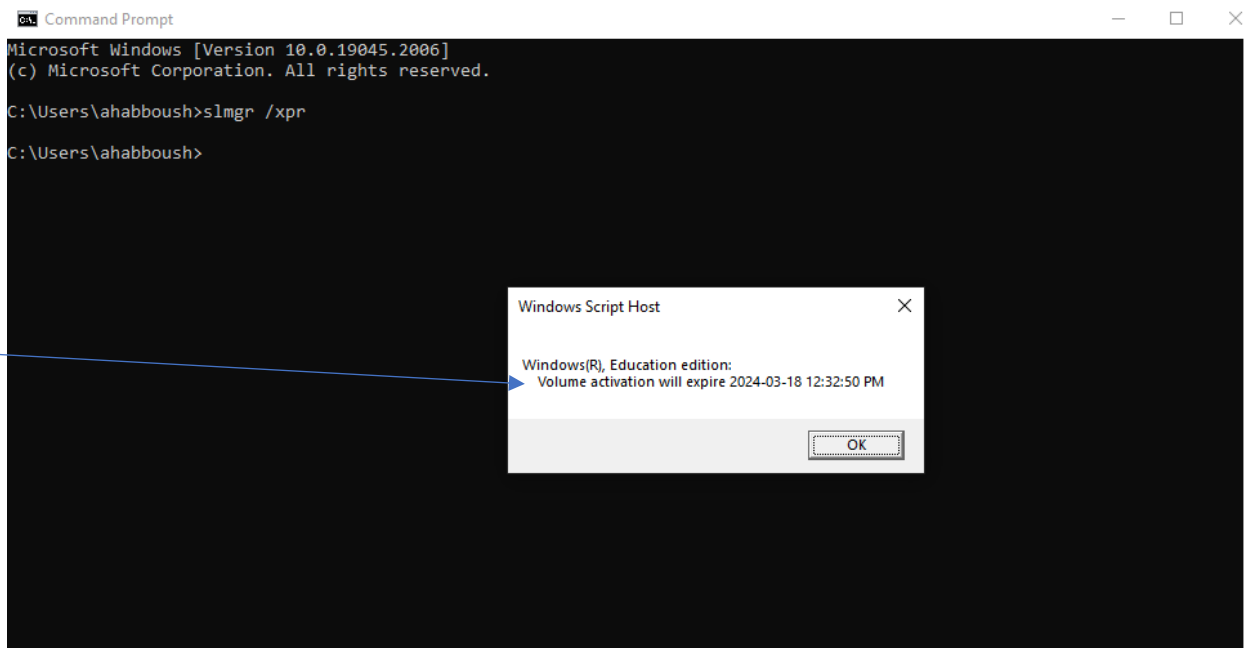

Image 2: The image shows computer name (1), Domain (2), Time and Date (3) and Time Zone with Location (4).
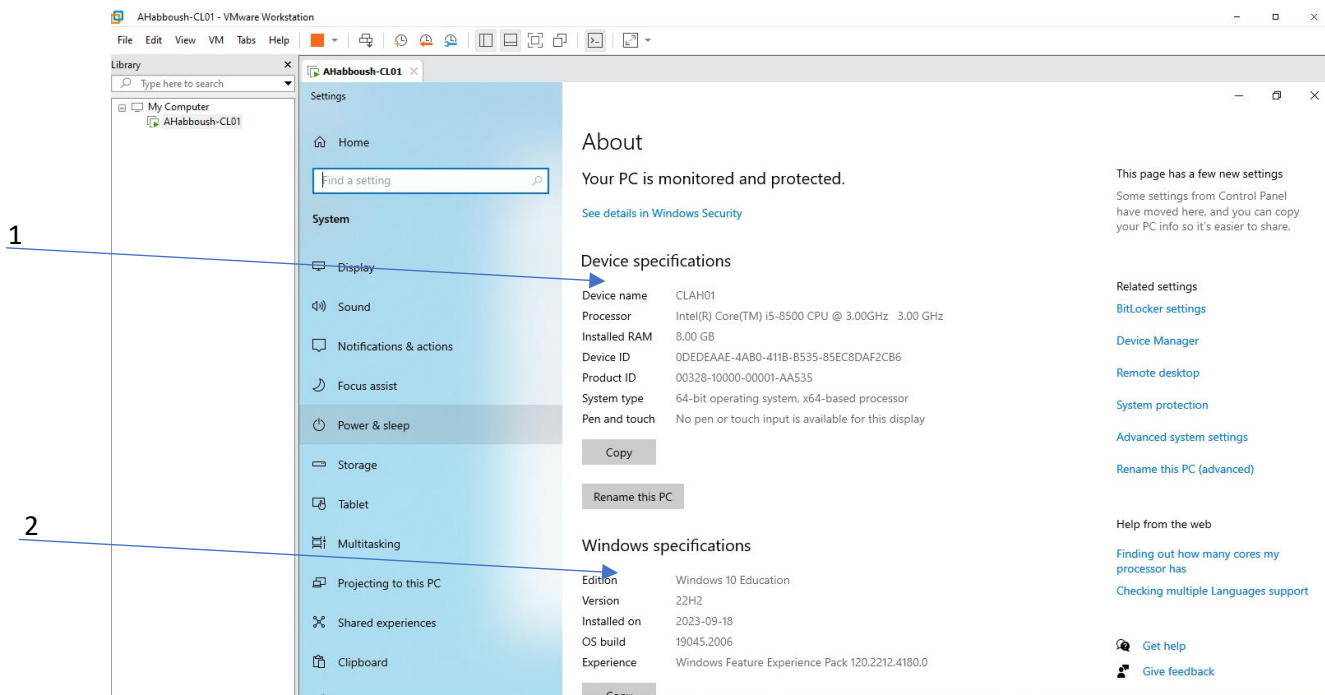
Image 3: The highlighted 5 lines the VMX live file added to the VM (1).

Image 4: A conformation of workstation's activation showing the expiry date (1).

Image 5: Shows Hostname, Processor, RAM, Product Key and system type (1). Windows 10 Education, Version 22H2, installation date (2).

Task 4: Windows Operating System configurations and modifications.

In this section we are install VMWare tools, Notepad++ and Speccy (image 6). A modification of the File Explorer View workstation in (Image 7) it shows the file explorer modification in both the VM and the host machine.
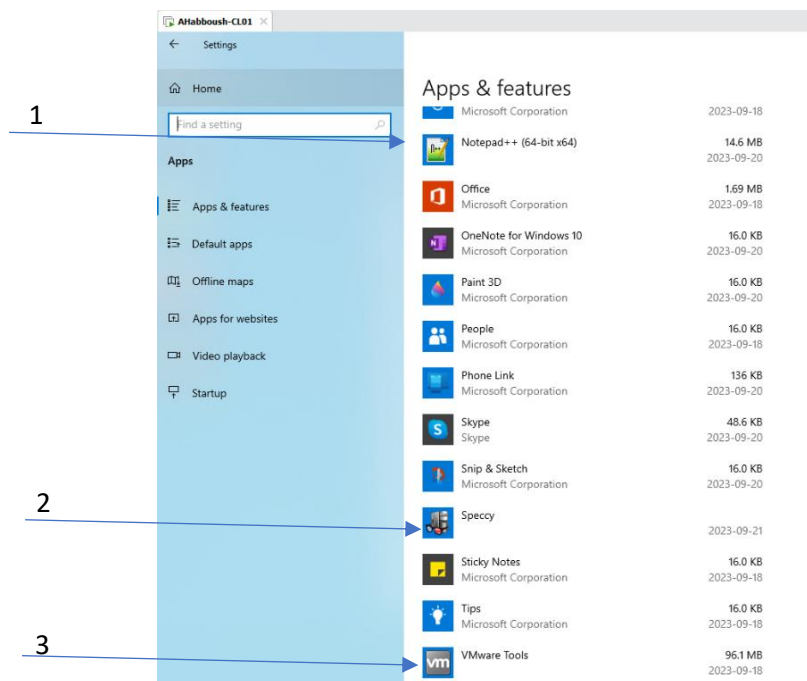
Image 6: Showing installed APPS on m y VM, Notepad++ (1), Speccy (2) and VMWare tools (3).

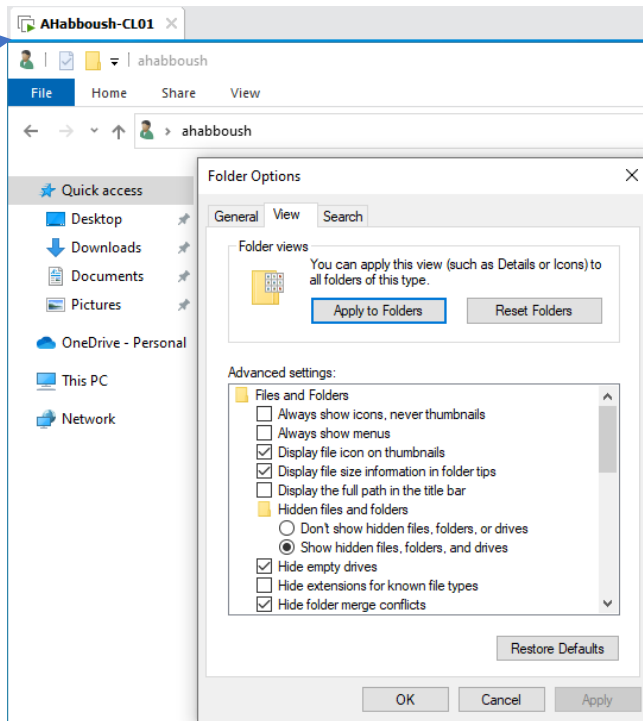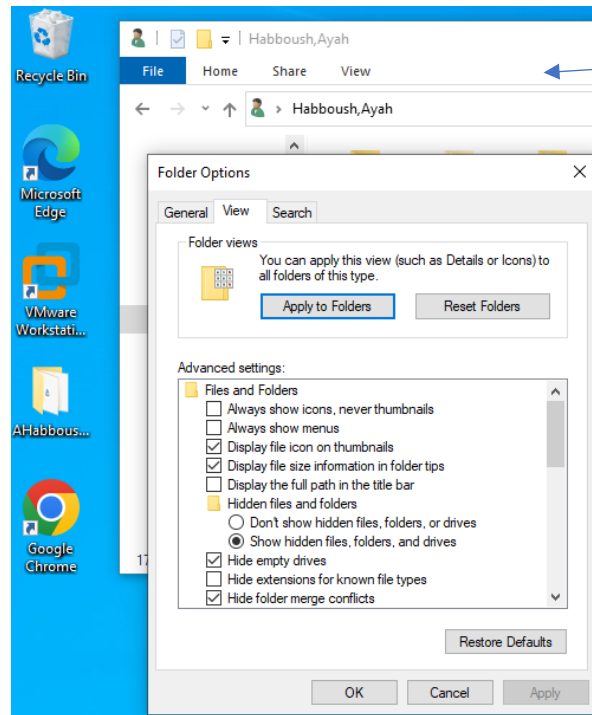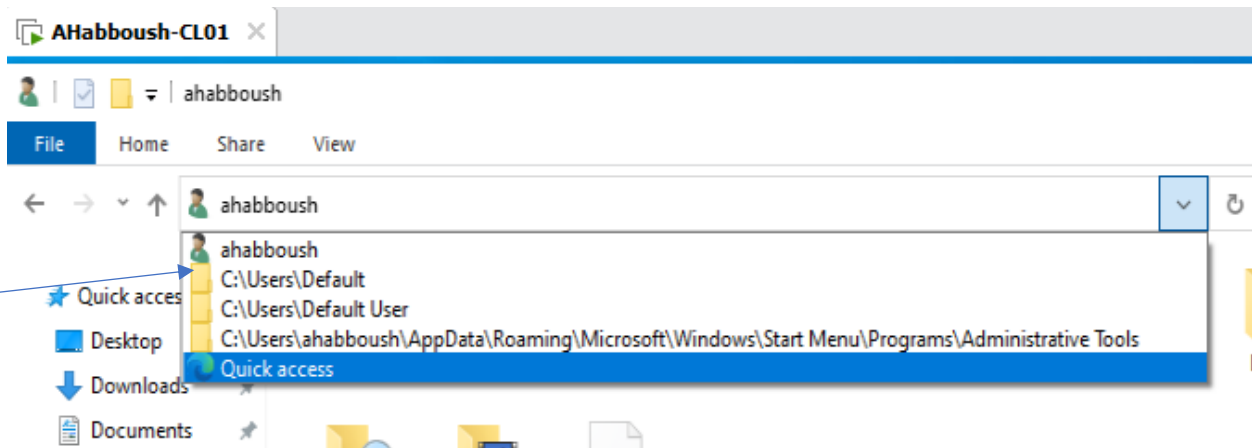**Image 7:** Modifications of file explorer on both the VM (1) and the host machine (2), and default user (3).

Question 1. There are 3 different activation types for volume licensing. Please list each method and give a brief description on how it works.

- **Multiple Activation Key (MAK)—** Activation can be online or over the phone. Identical to the original equipment manufacturer OEM or retail product key. Can be applied to many devices. Due to its ease of usage across different devices, this sort of activation is popular with large companies.

- **Key Management Service (KMS)—** This type is utilized in very large organizations where the computer must be connected to the internal network using the internal network's communication with the KMS server. It can also be utilized in situations when a firewall prevents direct activation by the user.

- **Active Directory-based activation—** Windows 8 and later versions introduced this kind of activation. where every 180 days, the computer communicates with the Active Directory domain rather than a server. The lack of communication with a particular server makes this method superior to the KMS activation method.

Task 5 – Creating and understanding Scheduled Tasks

In this section we are using the Task schedular to schedule a weekly reboot to enhance the system's performance and for updates to take place, deleting cache and temporary files. In short, its necessary for background maintenance and deleting unnecessary files. (Image 8-9).

Image 8: The final look for the scheduled task (1). Showing the General tab under the task properties with description (2), Triggers tab (3) and Action tab (4).
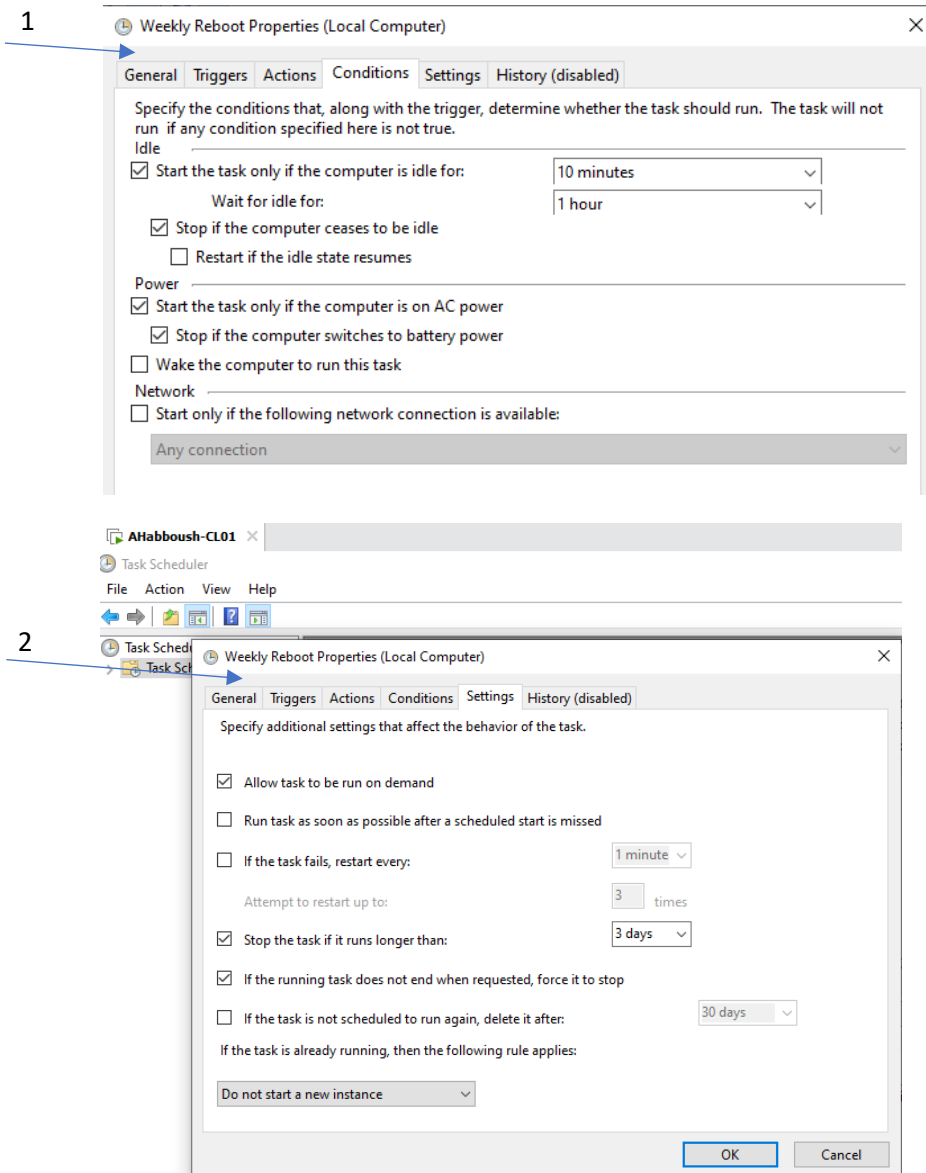
Image 9: Showing the Conditions tab under the task properties (1) and the settings tab (2).

==**Question 2.**== In addition to triggering **Begin the task**: "on a schedule", what are the other options available to trigger a task to begin?

- The other options are: At log on, at startup, on idle, on an event, at task creation/modification, on connection to user session, on disconnect from user session, on workstation lock, on workstation unlock.

**Question 3.** When we Begin the task "On a schedule" we selected weekly, what other time setting options are available?

- It can be monthly, weekly, daily, or one time schedule triggers. All customizable to date and time of when the task should start, if we want it to repeat, which day of the week to stop or delay the task and we can have it expire at a certain day and time.

Task 6 – Create a Custom MMC or Microsoft Management Console

In this task a custom MMC was created with added snap-in in the snap-in windows. A secured desktop shortcut is created as well (image10).
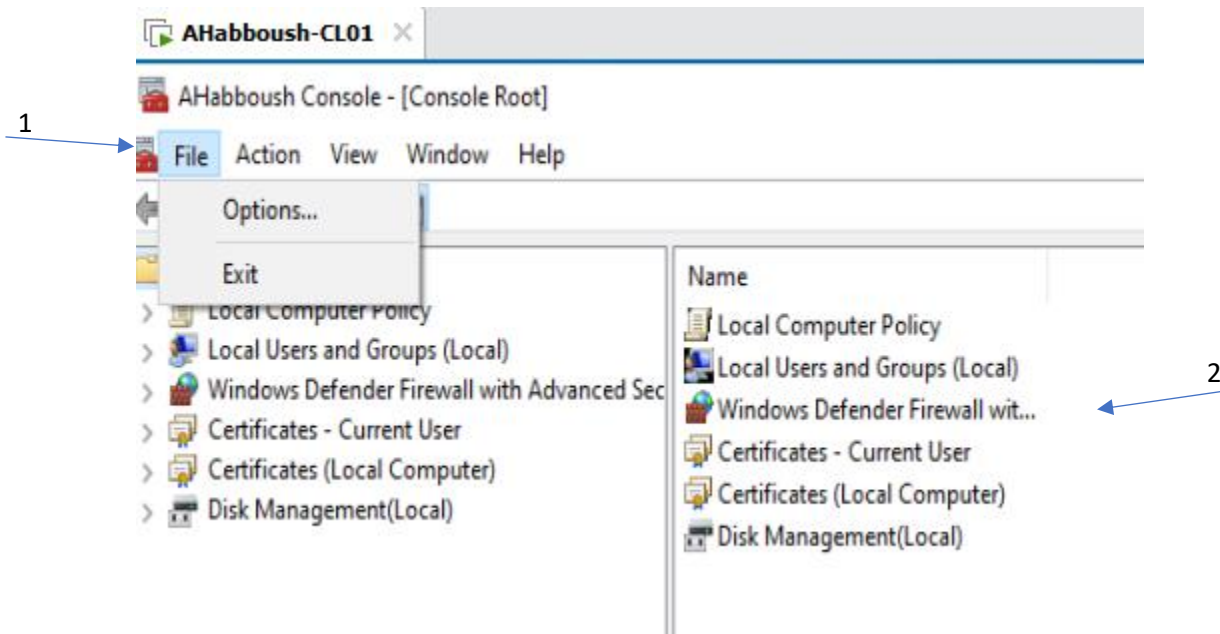

Image 10: The policies that we added in the custom MMC (1). Under the file tab we see that we can't add/remove any policies because its secured (set to User-Mode – Full Access) (2).

Question 4. What is the <u>full</u> path to the default save location in your professional document (hint: Use the dropdown box in "save in" to view the full path).

The full path of the file: C:\Users\ahabboush\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Administrative Tool

Task 7 – Backup and document professionalism

In the task it shows the snaps of the VM taken during the setup process (Image11). Also. It will show a snap of the Gold copy taken and its location (Image 12).
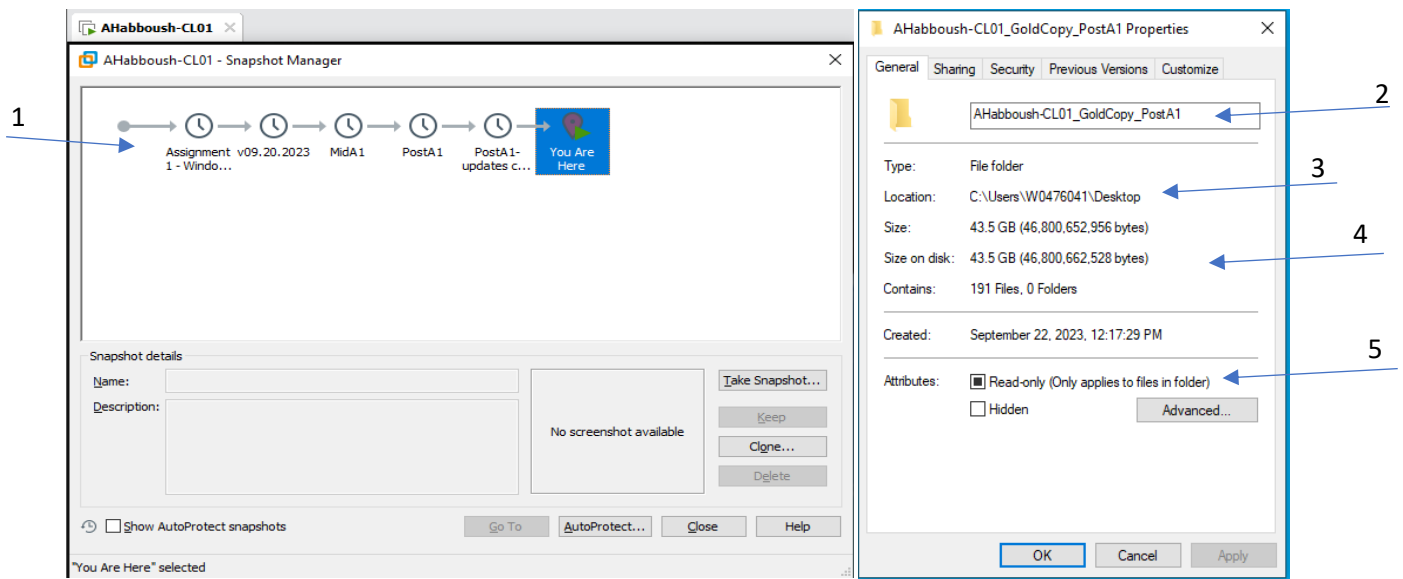
Image 11: VM snap shots for Mid assignment 1 and Post assignment 1(1). Gold Copy Name (2), Location (3), Contents (4) and the date it was created (5).

Conclusion

In this is assignment 1 we were able to create a Virtual Machine (VM) using the VMWare application. Windows 10 Educational Edition was installed, activated using the Key Management Service (KMS) method volume licensing and updated. The VM has Nptpad++, Speccy apps installed and VMWare tools. Configured VM by adding the VMX live file. Configuration of time, date and time zone. A weekly reboot task we created through Task Scheduler. A customized and secure shortcut of the Microsoft Management Console (MMC) was created. Finally, A snap and back up a Gold Copy of the current state of the VM was taken. All configurations are supported with images shown under each task.