VM Installation Assignment

1. Please describe and explain: what is an ISO or IMG operating system image file?
2. An ISO is a digital version of a CD/DVD with everything needed to install an OS like Windows or Linux. An IMG is similar but often used for USB drives or backups. Both put all OS files into one file for easy installation.
3. how can it be obtained?

You can download ISOs from official websites like Microsoft, Ubuntu, or Kali Linux. Schools or jobs might provide them too. Third-party sites exist but can be risky. You can even make your own ISO/IMG using tools like Rufus.

1. how is it used during installation of an Operating System on a virtual machine?

You load the ISO into VirtualBox (or another VM software) as a virtual disk, then set the VM to boot from it. The installer runs, sets up the OS, and once installed, the VM boots from its virtual hard drive.

1. List five (5) things you did to prepare for creating and installing the Operating System on a new Virtual Machine.
2. I downloaded the Kali Linux ISO from their site,
3. I installed VirtualBox,
4. I checked my PC’s RAM and storage,
5. I set up a new VM with decent settings,
6. Mounted the ISO to boot from it
7. Please list a minimum of 3 PC specifications you need to check before VM installation and why.

* RAM’s key—Kali needs 2GB, but 4GB’s smoother, or your PC lags.
* CPU matters too—needs 64-bit and virtualization (VT-x/AMD-V) for speed.
* Storage’s must be at least 20GB+ so the VM doesn’t lag or crash

1. List at least six (6) steps you completed when installing the Operating System on the Virtual Machine (this question is about installing the O/S - not about installing the VM software like VMWARE, Hyper-V, Virtual Box, etc.).

In other words, what happens after the ISO/IMG image file was mounted and the O/S install started? What happens before your new O/S is ready to be used? Please use screenshots of your installation of Kali Linux using VirtualBox for full credit. A minimum of 6 screenshots.

During the installation of Kali Linux on VirtualBox, I followed several key steps to set up the system.

1st , I selected “Graphical Install” to start the process.

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2nd, I chose my language, location, and time zone to match my region.

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3rd, I created a user account by setting a username and password for system access.

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4th, I partitioned the disk using the “Guided - Use Entire Disk” option, which automatically created the necessary partitions.

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5th Once partitioning was done, the installer copied system files and installed GRUB, the bootloader that helps the OS start up.

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6th and Finally, I restarted the system and successfully logged into my newly installed Kali Linux environment.

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1. Please describe any issues you encountered installing or using the VM. If you did not encounter issues – list something new you learned about installing or using VMs.

* I ran into a few issues while setting up my VM. At first, it lagged because of low RAM, but I fixed it by increasing it to 4GB. I also had no internet connection, which was annoying, but switching to “Bridged Adapter” solved it. At one point, the boot failed, so I had to reinstall GRUB in recovery mode to fix it. On the bright side, I learned that shared clipboard is super useful, and Guest Additions makes everything run smoother.

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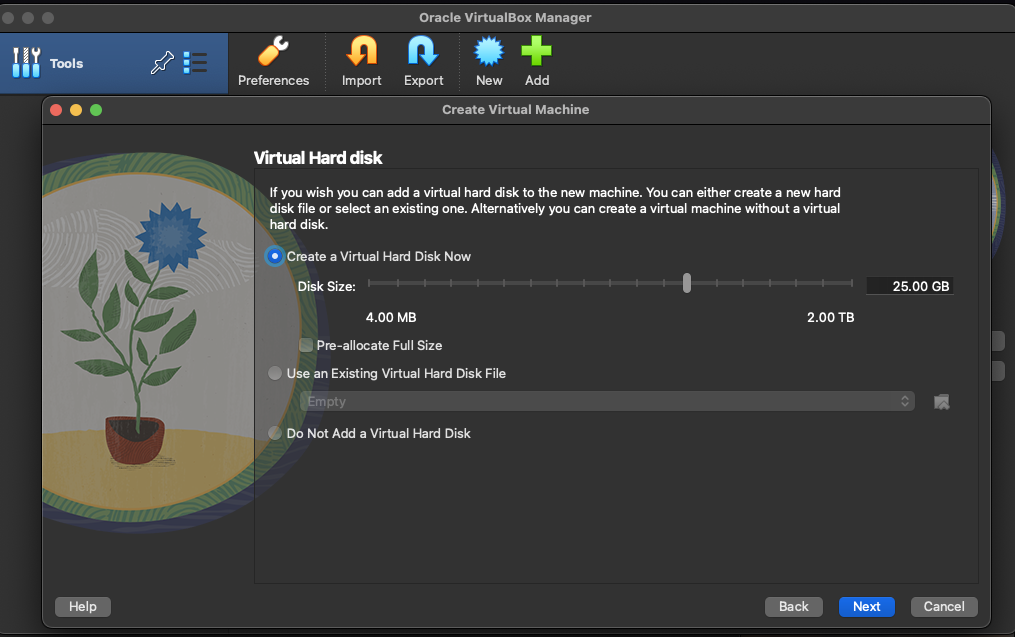
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