**Assignments -- 20th April**

**1.Who manages the port?**

Operating system

**2.Who manages IP address in a network?**

Router

**3.What is a Hypervisor?**

The key is to enable hypervisor virtualization. In its simplest form, a hypervisor is specialized firmware or software, or both, installed on a single hardware that will allow you to host multiple virtual machines. This allows physical hardware to be shared across multiple virtual machines. The computer on which the hypervisor runs one or more virtual machines is called the host machine.

Virtual machines are called guest machines. The hypervisor allows the physical host machine to run various guest machines. It helps to get maximum benefit from computing resources such as memory, network bandwidth and CPU cycles.

or

A**hypervisor**, also known as a virtual machine monitor or VMM, is software that creates and runs virtual machines (VMs). A hypervisor allows one host computer to support multiple guest VMs by virtually sharing its resources, such as memory and processing.

**4.What are the pre-requisites for installation a Hypervisor?**

1. Hardware settings.
2. Virtuallization software need to be install.
3. ISO VM it should contain OS installation files.

**5.What are the steps required to create a VM?**

1. Launch VMware Workstation.
2. Click **New Virtual Machine**.
3. Select the type of virtual machine you want to create and click **Next.**
4. 4.Click on custom one and next.
5. Select your guest operating system (OS), then click **Next**. You can install the OS using:

An installer disc (CD/DVD)

An installer disc image file (ISO)

1. Click **Next.**

7.Enter your Product Key.

8.Create a user name and password.

1. Enter a virtual machine name and specify a location for virtual machine files to be saved, click **Next**.

8.Establish the virtual machine's disk size, select whether to store the virtual disk as a single file or split the virtual disk into 2GB files, click **Next**.

9.Verify the other configuration settings for your virtual machine:

* + Memory – change the amount of memory allocated to the virtual machine.
  + Processors – change the number of processors, number of cores per processor, and the virtualization engine.
  + CD / DVD – with advanced settings where you can choose between SCSI, IDE.
  + Network adapter – configure it to bridge, NAT, or Host-only mode, or customize where you can choose between 0 to 9 adapters.
  + USB Controller.
  + Sound card.
  + Display – enable 3D graphics.

10.Click **Finish**.

11.When the virtual machine is powered on, the VMware Tools installation starts. You are prompted to restart your virtual machine once the Tools installation completes.

**6.What are the drawbacks of Hypervisor?**

**1. It creates a security risk.**

**2. It creates an availability issue.**

**3. It can have a high cost of implementation.**

**Assignment--April 18**

**What is virtualization?**

****Virtualization**** is the "creation of a virtual (rather than actual) version of something, such as a server, a desktop, a storage device, an operating system or network resources".

In other words, Virtualization is a technique, which allows to share a single physical instance of a resource or an application among multiple customers and organizations. It does by assigning a logical name to a physical storage and providing a pointer to that physical resource when demanded.