#### Instructions:

- Update your student's name and N number in the header of this document.
- Add your answers at the bottom of this word document.

#### Task 1

- 1. What do you understand by the term operating system?
- 2. List down the history of Microsoft client operating systems released by Microsoft.
- 3. List down the history of Microsoft servers operating systems released by Microsoft.
- 4. List down last 3 versions for CentOS, RedHat and Ubuntu Operating systems.

#### Task 2

- Find out the following details for your desktop/Laptop.
  - 1. Hard drive space
  - 2. Memory (RAM)
  - 3. System Model
  - 4. OS version
  - 5. Type of Battery
  - 6. Network cards
  - 7. BIOS version

### **Answer**

# 1. What do you understand by the term operating system?

Operating syaytem is to manage all the resources of the computer.

Opreating system is an interface between the softwares and different hardware of the computer. It is basically designed for manage the overall resources and operations of the computer. We can call it as a set of programs which is developed to handle all the execution of all other hardware and softwares. few widely used operating systems, such as Windows, Linux, and Mac OS, exist.

## 2. List down the history of Microsoft client operating systems released by Microsoft.

It is a oprating system which is simply installed on client devices such as laptops and computers.

- 1. MS-DOS 1981
- MS-DOS was Microsoft's initial operating system.
- 2. Windows 1.0 1985
- it was Microsoft's first graphical user interface (GUI) operating environment.
- 3. Windows 2.0 1987
- Windows 2.0 added overlapping windows, new tools, and enhanced graphics support...
- 4. Windows 3.0 1990
- Windows 3.0 introduced major advances in terms of performance and functionality and began to acquire general acceptance..
- 5. Windows 3.1 1992
- Windows 3.1 introduced new features.

#### 6. Windows 95 - 1995

- Windows 95 was a significant release that introduced the Start Menu and a new user interface, paving the way for future Windows versions.

## 7. Windows 98 - 1998

- Windows 98 enhanced Windows 95 by adding features and providing greater hardware support.

#### 8. Windows Me - 2000

- Windows Me was an updated version with a consumer-oriented focus on multimedia.

### 9. Windows 2000 Professional - 2000

- Windows 2000 had improved stability and security and was designed with business and professional users in mind.

#### 10. Windows XP - 2001

- Windows XP was a well-liked and enduring operating system renowned for its dependability and intuitive design.

## 11. Windows Vista - 2007

- New graphic elements and enhanced security measures were introduced with Windows Vista.

### 12. Windows 7 - 2009

- Windows 7 quickly gained popularity among consumers because to its performance enhancements over Vista.

### 13. Windows 8 - 2012

- Windows 8 aims to eliminate the divide between desktop and mobile computing by utilizing a touch-centric interface.

#### 14. Windows 8.1 - 2013

- Windows 8.1 was an update to Windows 8 that fixed various issues and enhanced the user interface.

#### 15. Windows 10 - 2015

- Windows 10 brought back the Start Menu and introduced a unified platform for various devices, including PCs, tablets, and smartphones.

### 16. Windows 11 - 2021

- The most recent major release, Windows 11, includes a new user interface as well as many performance and productivity enhancements.

## 3. List down the history of Microsoft servers operating systems released by Microsoft.

It is an operating system intended for usage on servers. It is utilized to give services to a large number of clients.

- 1. Windows NT 3.1 Server 1993
- The first server operating system in the Windows NT family, Windows NT Server, was created for server and enterprise use.
- 2. Windows NT 3.5 Server 1994
- Upgrades and improvements were made to Windows NT Server compared to the initial release.
- 3. Windows NT 4.0 Server 1996
- Windows NT 4.0 Server came with Active Directory, DNS, and scalability and stability upgrades.
- 4. Windows 2000 Server 2000
- Windows 2000 Server enhanced network administration features and introduced Active Directory.
- 5. Windows Server 2003 2003
- Windows Server 2003 outperformed Windows Server 2000 in terms of security, manageability, and scalability.
- 6. Windows Server 2008 2008
- Server Core, increased virtualization capabilities, and improved security were all introduced with Windows Server 2008.
- 7. Windows Server 2008 R2 2009
- This was a more advanced version of Windows Server 2008 with improved performance and virtualization features.
- 8. Windows Server 2012 2012
- The release of Windows Server 2012 improved scalability, cloud integration, and virtualization.
- 9. Windows Server 2012 R2 2013
- Windows Server 2012 R2 increased compatibility with Windows 8.1 and included improvements to the prior version.
- 10. Windows Server 2016 2016
- Nano Server, container support, and improved security features were all introduced with Windows Server 2016.
- 11. Windows Server 2019 2018
- Security, hybrid cloud interoperability, and hyperconverged infrastructure were all improved in Windows Server 2019.
- 12. Windows Server 2022 2021
- The most recent major release, Windows Server 2022, emphasizes hybrid cloud scenarios, security, and containerization.

## 4. List down last 3 versions for CentOS, RedHat and Ubuntu Operating systems.

Here, I have mentioned only the major release.

#### **CentOS**

- 1) CentOS Version 8: September, 2019.
- 2) CentOS Version 7: July, 2014.
- 3) CentOS Version 6: July, 2011.

#### RedHat

- 1) Red Hat Enterprise Linux 9: May, 2022.
- 2) Red Hat Enterprise Linux 8: May, 2019.
- 3) Red Hat Enterprise Linux 7: June, 2014.

## Ubuntu

- 1) Ubuntu 22.04 LTS: April, 2022.
- 2) Ubuntu 20.04 LTS: April, 2020.
- 3) Ubuntu 18.04 LTS: April, 2018.

## Details of my Laptop.

- a. Hard drive space 256 GB (236 usable)
- b. Memory (RAM) 16 GB (15.2 GB usable)
- c. System Model Latitude 5431
- d. OS version Microsoft Windows 11 Home 10.0.22621 version 22H2 Build 22621
- e. Type of Battery lithium polymer battery (DESIGN CAPACITY 64,007 mWh)
- f. Network cards 3 NIC(s) Installed.
  - 1. [01]: Intel(R) Wi-Fi 6E AX211 160MHz
  - 2. [02]: Intel(R) Ethernet Connection (16) I219-LM
  - 3. [03]: Bluetooth Device (Personal Area Network)
- g. BIOS version Dell Inc. 1.14.0, 6/12/2023