Third Worksheet: OPERATING SYSTEMS

1st TASK: GAP FILL EXERCISE.

An **operating system (OS)** is the fundamental software that manages a computer's hardware and software resources. It provides a stable and consistent way for applications to interact with the hardware without needing to know all the details of the hardware. The OS acts as an _____ (1) between the user and the computer hardware.

One of the main functions of an OS is **process management**, which involves creating, scheduling, and _____ (2) processes. It ensures that each process gets enough CPU time and that no process can monopolize the system. Another essential task is **memory management**, which controls how memory is allocated and _____ (3) among different programs.

Operating systems also handle **file management**, organizing data into files and directories on storage devices. They control how data is read and written, and manage access _____ (4) to ensure security and privacy. Modern operating systems support **multitasking**, allowing multiple programs to run _____ (5).

Examples of popular operating systems include **Windows**, **macOS**, **Linux**, and **Android**. Each has its own interface and design philosophy, but they all share the same fundamental purpose: to make computing more efficient and user-friendly.

Another key aspect is the **user interface (UI)**. Some operating systems provide a **graphical user interface (GUI)**, while others rely on a **command-line interface (CLI)**. The GUI allows users to interact with the system through icons and windows, while the CLI enables direct text-based commands for _____ (6) control.

Security is also a critical component. The OS must protect the system from unauthorized access and ensure that only authenticated users can execute certain operations. Features such as **user accounts**, **password protection**, and **encryption** are essential for maintaining system _____ (7).

In addition, the OS manages **device drivers**, which allow the system to communicate with hardware components such as printers, keyboards, and displays. Without drivers, hardware would not function properly because the OS would not know how to _____ (8) with it.

Another important function is **resource allocation** — deciding how system resources like CPU, memory, and disk space are distributed among users and programs. The OS must balance performance and fairness to ensure that all processes _____ (9) efficiently.

In conclusion, the operating system is the **backbone** of any computing device. It coordinates all hardware and software activities, ensuring that everything runs smoothly. Without it, even the most powerful hardware would be _____ (10).

2nd TASK: Comparing Operating Systems.

Objective:

To explore the key features, advantages, disadvantages, and typical uses of the four main operating systems: **Windows, macOS, Linux, and Android.**

Instructions:

Work individually or in pairs. Use reliable online sources if necessary. Complete the following table and then discuss your answers in class.

Operating System	***Advantages***	***Disadvantages***	***Typical Uses / Devices***
Windows:			
macOS:			
Linux:			
Android:			

Follow-up Discussion Questions:

1. Which operating system do you use most often and why?
2. In what ways is Linux different from Windows or macOS?
3. Why do you think Android dominates the mobile market?
4. Which system would you recommend for a beginner programmer, and why?
5. How do security features differ between these systems?

3rd TASK: FIND THE MISTAKES. There are 10 grammar mistakes hidden in the text.

The Story of Operating Systems

Operating systems has changed the world of computing more than any other type of software. The first version of **Windows** appeared in 1985 and it was at that time very simple. However, Microsoft were quickly improving it, and by the 1990s it becomes the most popular system for personal computers.

At the same time, **Apple** was developing its own system called **Mac OS**, which was known for its beautiful design and easy navigation. Many people says that without Apple, the modern graphical user interface would not exist today.

In 1991, a young student from Finland named **Linus Torvalds** created the first version of **Linux**, because he didn't was satisfied with existing systems. What makes Linux special is that it is completely open-source — everyone can change and share it for free. Today, Linux run everything from smartphones to space rockets.

Android was born later, in 2008, and is based on Linux kernel. It become so popular that now over 70% of smartphones in the world uses it. Android allowed users to personalize they phones and developers to create apps more freely than ever before.

So, the history of operating systems shows how innovation and competition has drive technology forward — and how these four systems still shaping our digital world today.

Task:

1. Find **10 grammar mistakes** in the text and underline them.
2. Correct the forms and explain what was wrong.
3. Bonus: Which part of the text did you find most interesting — and why?

4th TASK: Guess the Topic! Key Terms.

Based on these terms, try to guess what the topic of our next lesson will be.

1. Core Web Concepts

1. Address bar
2. Browser
3. Domain name)
4. HTTP (Hypertext Transfer Protocol)
5. IP address
6. Server
7. URL (Uniform Resource Locator)
8. Top-level domain
9. Web hosting

2. Website and Design Elements

1. Homepage
2. Path
3. Tag
4. Template
5. Web design
6. Website
7. Web page
8. HTML (HyperText Markup Language)
9. Web developer

3. Searching and Interaction

1. Search engine
2. Search box
3. Result listing
4. Voice search
5. Hyperlink
6. Web address
7. Cookies
8. Cache
9. Domain name system (DNS)

Name of the topic: