**Практичне завдання “Work-case 5”**

**1. Consider these questions and give answers: (робила студентка Андрущик Поліна)  
-Very often occurs when working with a personal computer  
the need to connect peripheral equipment. On the example of a printer  
and flash drives, describe what mechanism the Linux OS has for working with them.**In the Linux operating system, peripherals such as printers and flash drives usually interact using kernel drivers and corresponding interfaces in user space.

Printer:  
-When you connect a printer to a Linux computer, the kernel can automatically detect the device and select or suggest a driver that supports that printer.  
-If the driver is already installed, the operating system may provide the ability to configure the printer through a graphical interface or command line.  
-Some Linux distributions have a printer control center that allows you to add, remove, and configure printers in a convenient way.

Flash drive:  
-Connecting a flash drive to a computer causes its file system to be automatically detected and mounted to a specific point in the Linux file system (for example, /media/username/flash\_drive).  
-The Linux kernel supports various file systems, such as FAT, NTFS, EXT4, and others, so the flash drive will be automatically recognized regardless of the file system used on it.  
-After connecting the flash drive to the system, the user can access it through the file manager or the command line, working with the files and folders contained on it.

**-What is the essence of the mounting operation, why is it used and how?**The mount operation in operating systems, including Linux, consists of attaching the file system stored on the device to the file system directory tree in the computer's RAM. This is necessary to access data stored on this device through the operating system's file system. The mount is used to temporarily or permanently connect external devices such as flash drives, hard drives, CD / DVD drives, etc. The mounting process can be automated or require user intervention, usually depending on the operating system settings. On Linux, for example, you can use the mount command to manually mount devices, or set up automatic mounting via the /etc/fstab file. Once the device is mounted, the user can access its contents through standard operating system tools such as the file manager or the command line.

**-What is the difference when working with peripherals in Linux OS and Windows OS?**The main difference between working with peripherals in Linux and Windows operating systems is the approach to management and interaction with devices.

In Linux, interaction with peripherals such as printers, flash drives, and others is often based on standards and protocols supported by open drivers and community software. Adding and managing devices can be more straightforward, using the command line or GUI.

In Windows, most peripherals often come with their own drivers developed by the device manufacturers. Installing drivers and managing devices is usually done using specialized installation programs or through system settings. Windows can automatically install drivers for some devices by default, but this can be a less transparent process compared to Linux.

**2. Connect a flash drive to your virtual machine with the Linux OS installed  
and printer (if possible) and through the GUI copy one  
file from a flash drive to a virtual machine and print it (the same steps  
repeat, but with a different file and through commands in the terminal). (робив студент Бурбан Данило)**