Computer software Operating systems.

Prepared by: _____

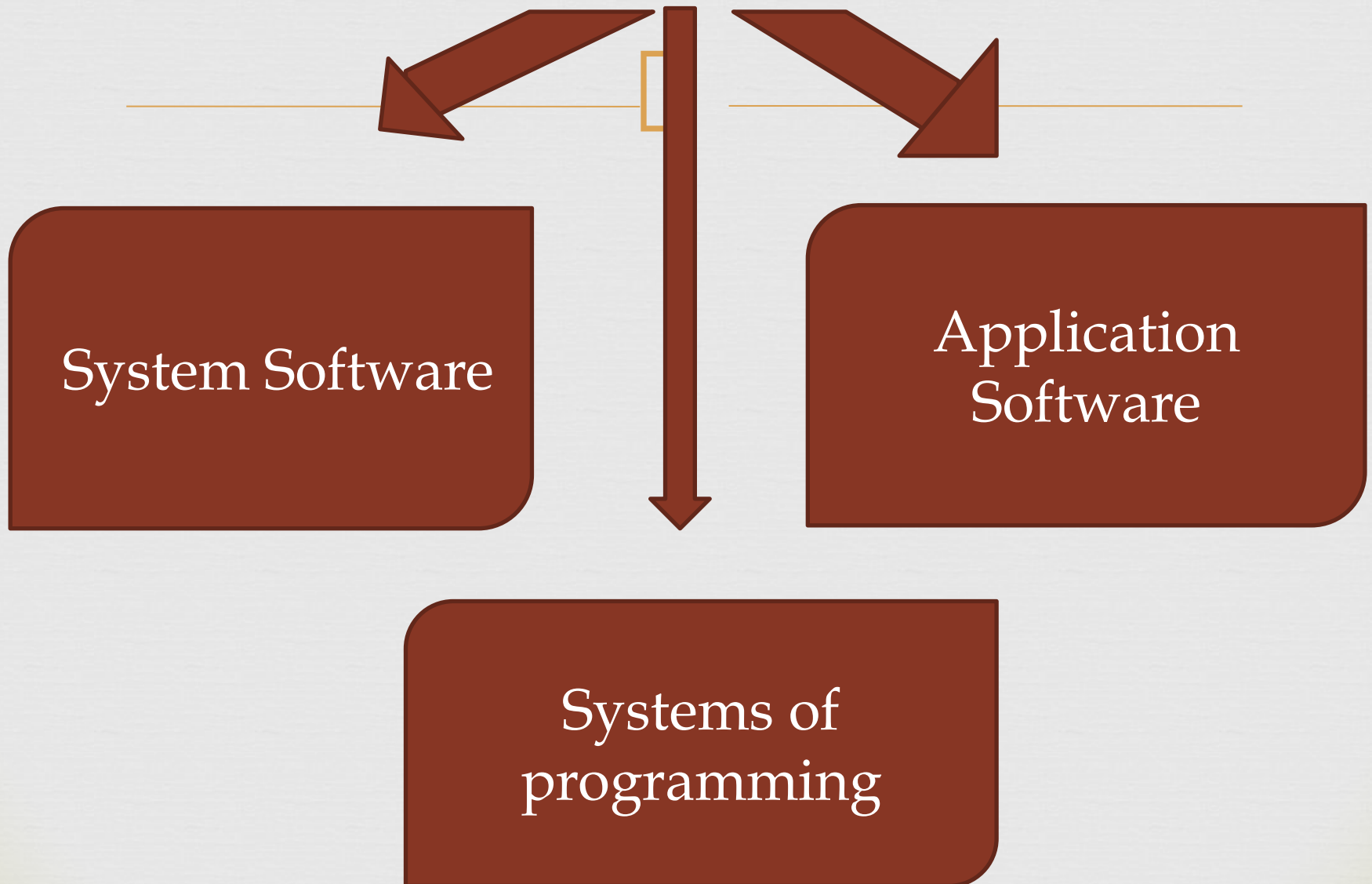Group: PPk 16-3

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Plan

- The notion of software
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The notion of software

- The **program** - is a specific set of ordered operations for a computer to perform.
- The collection of all programs designed to run on a computer, called the **software** computer.
- A computer is considered as a system consisting of interrelated parts: hardware (technical devices) and software.

Computer programs

System Software

Application Software

Systems of programming

Systems of programming

❖ System software includes the operating system and service programs.
❖ Operating System - a set of programs that provide operation of all computer devices and gives the user access to computer resources.
❖ The most common operating system for personal computers:

Operating system (OS)

Is system software that manages computer hardware and software resources and provides common services for computer programs.

Basic functions of the operating system

Operating System

Device configuration
Controls peripheral devices connected to the computer

File management
Transfers files between main memory and secondary storage, manages file folders, allocates the secondary storage space, and provides file protection and recovery

Memory management
Allocates the use of random access memory (RAM) to requesting processes

Interface platform
Allows the computer to run other applications.

Each operating system consists of three mandatory parts:

- I. Kernel - command interpreter, translator from translational programming language to "iron", machine code language.
- II. The driver - is compatible with the management of various devices included in the computer, such as printer driver, scanner driver, system-map driver.
- III. The interface - is a whole complex of user-friendly communication with the computer, which defines the user's communication skills with the computer.

Other function of Operating System

- best use of the computer resources
- provide a background for user's programs to execute
- display and deal with errors when it happens
- control the selection and operation of the peripherals
- act as a communication link between users
- system protection