

# IT Essentials

د/ اسامه النحاس

# التعرف على مكونات الحاسب الرئيسية

# The Computer System

- The computer system consists of four parts:
  - Hardware
  - Software
  - Data
  - Users ( liveware, humanware or peopleware )

## Hardware

computer's physical  
components



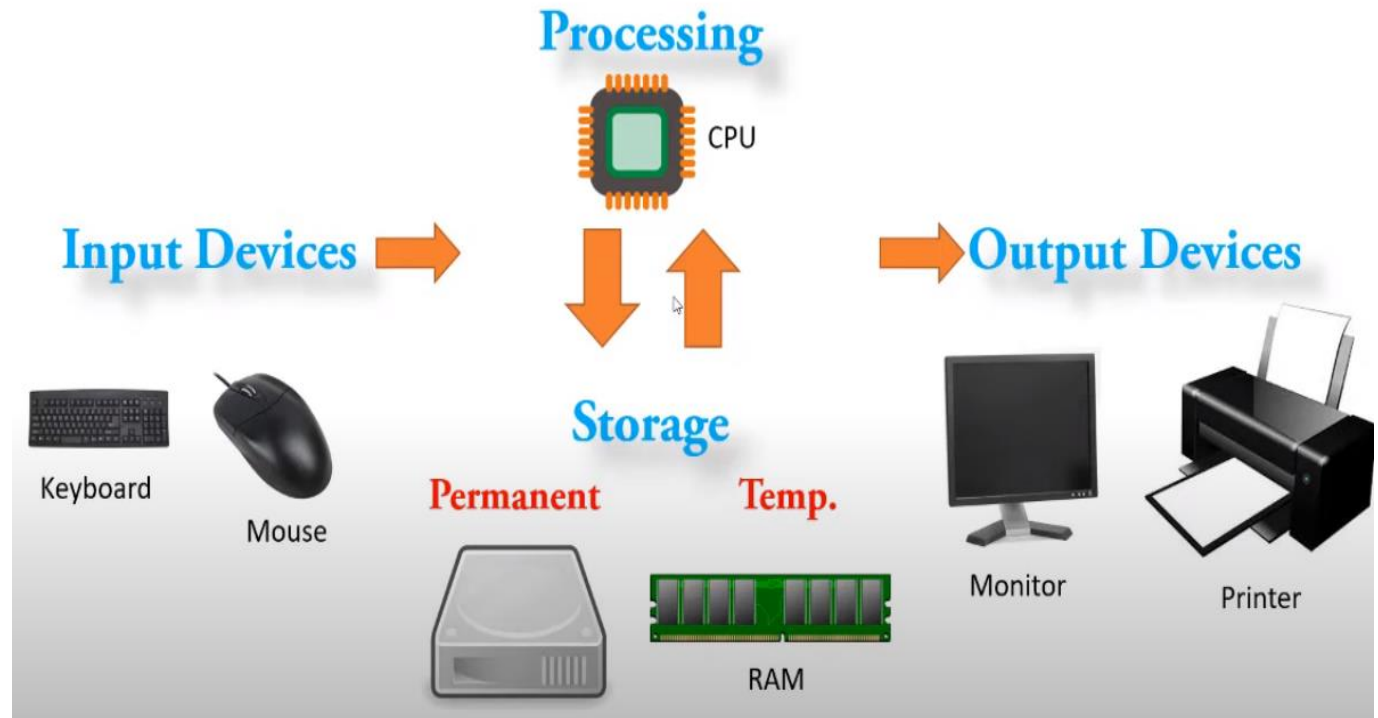
## Software

Set of Instructions that directs  
the hardware to accomplish a  
task

# The Input-Process-Output Concept

A **computer** is an electronic device that: accepts data, processes data, generates output (information), and stores data, information, and instructions.

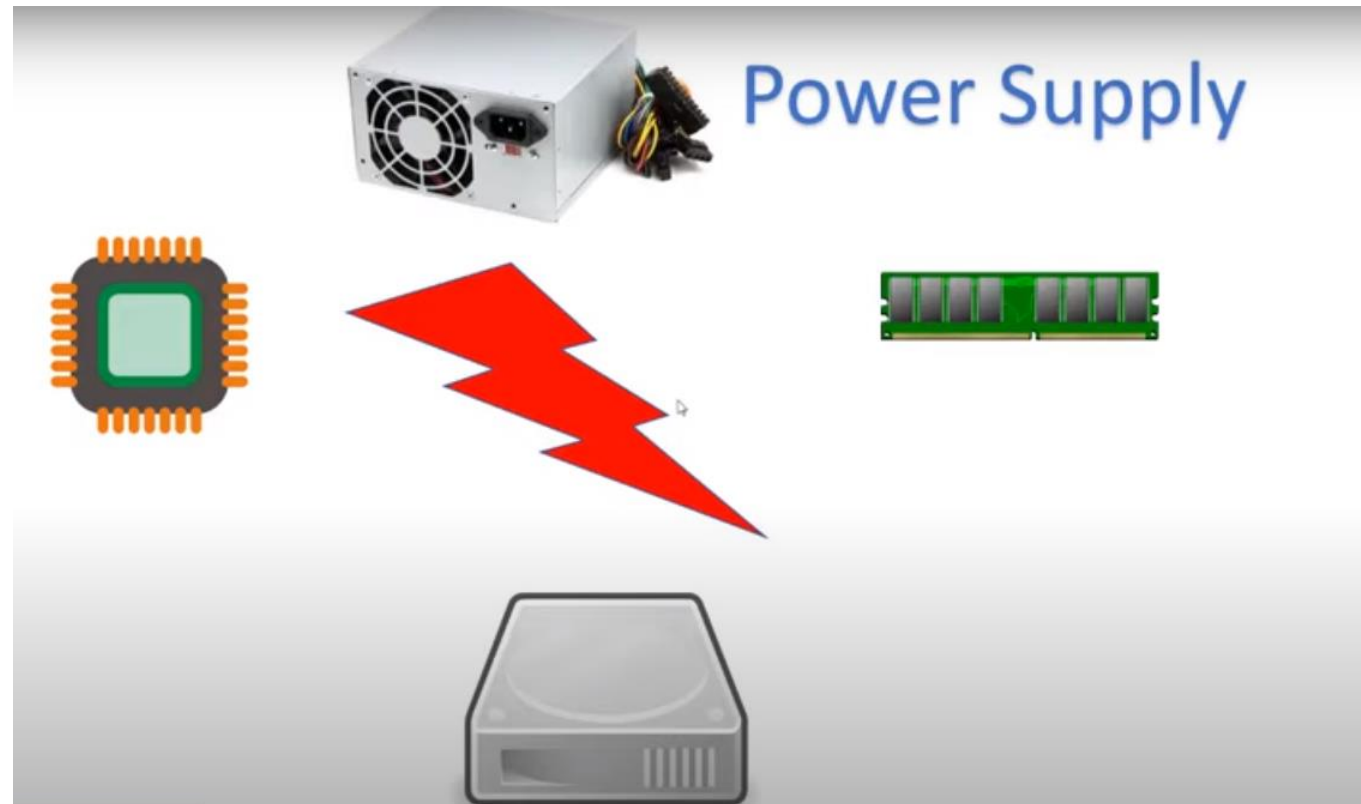
- Input
- Process
- Output
- Storage



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I/O Ports



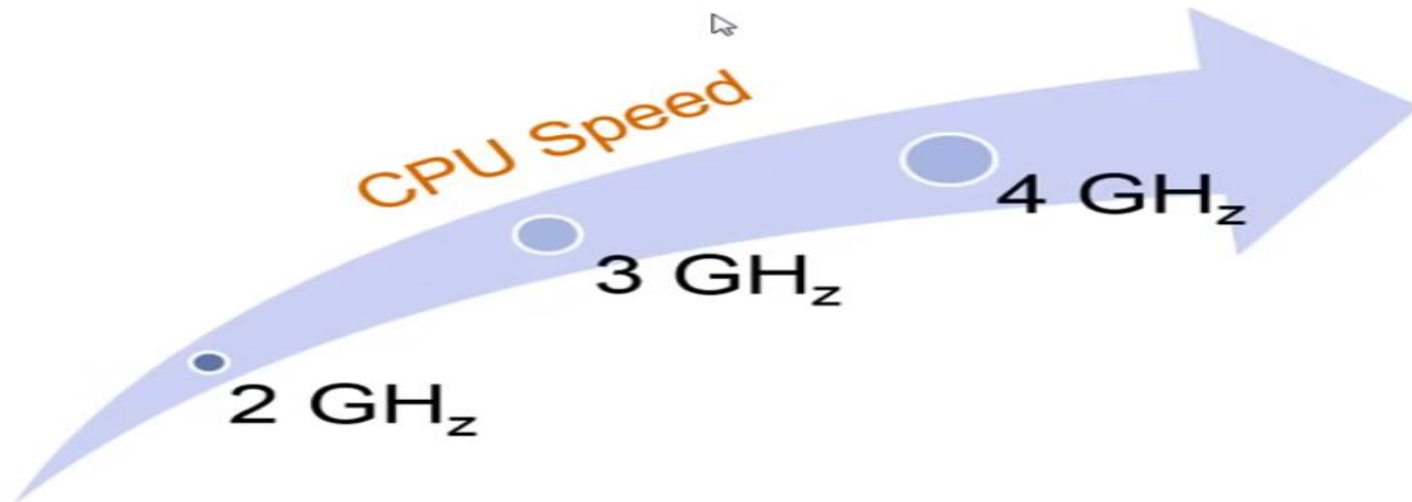
# التعرف على مكونات الحاسب الرئيسية

## The CPU

- CPU stands for *Central Processing Unit*
- *Processor*

## CPU Speed

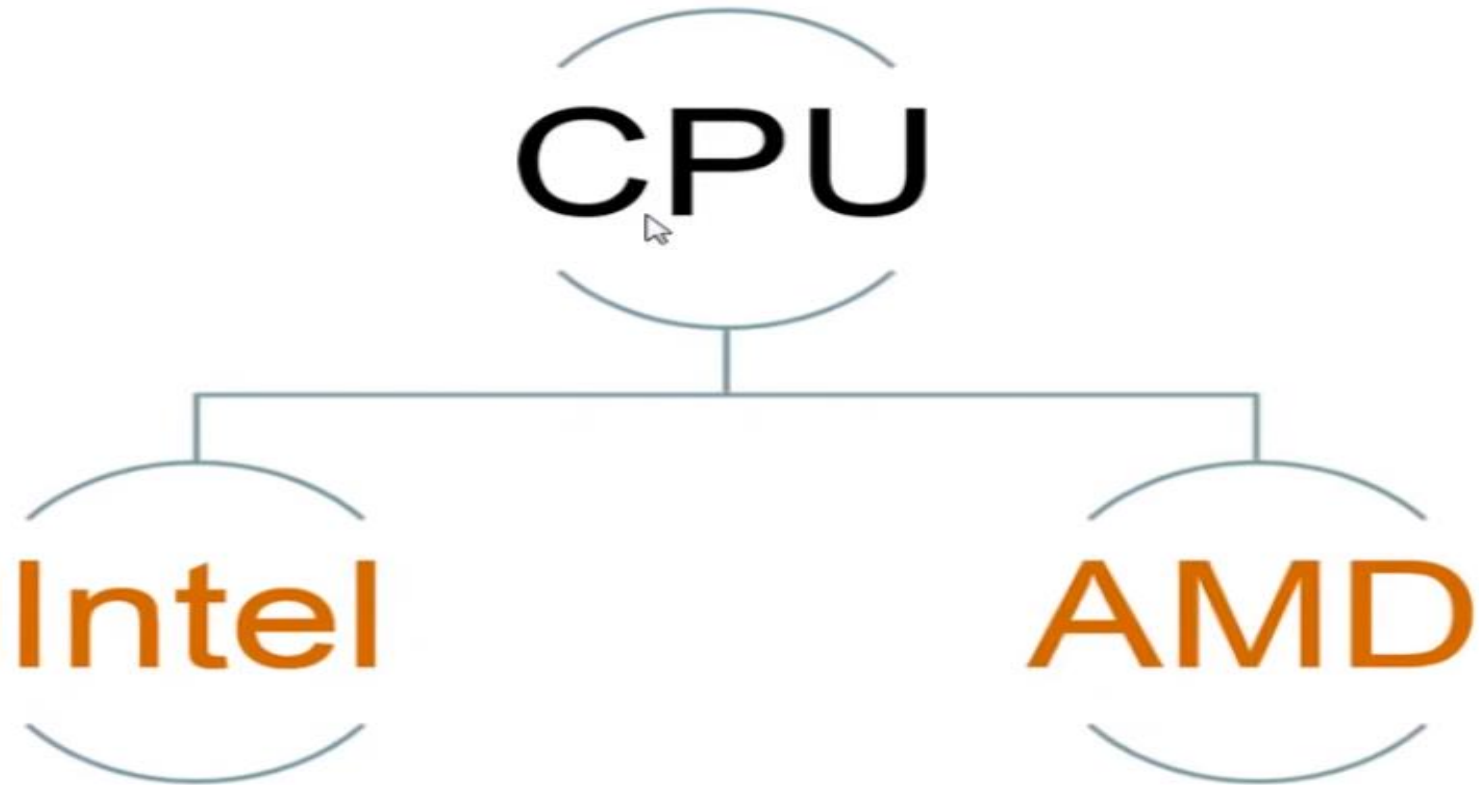
- CPU speed measured by *Hertz*
- *Hertz(Hz)* = Cycle per second
- *Giga Hertz (GHz)* = Billion cycle per second





# التعرف على مكونات الحاسب الرئيسية

## CPU Manufacturers





# التعرف على مكونات الحاسب الرئيسية

## CPU

### Intel

- Pentium
- Celeron
- Dual-Core
- Core 2-Duo
- Core i3
- Core i5
- Core i7



### AMD

- Phenom
- Athlon



# LAPTOP SPECIFICATION

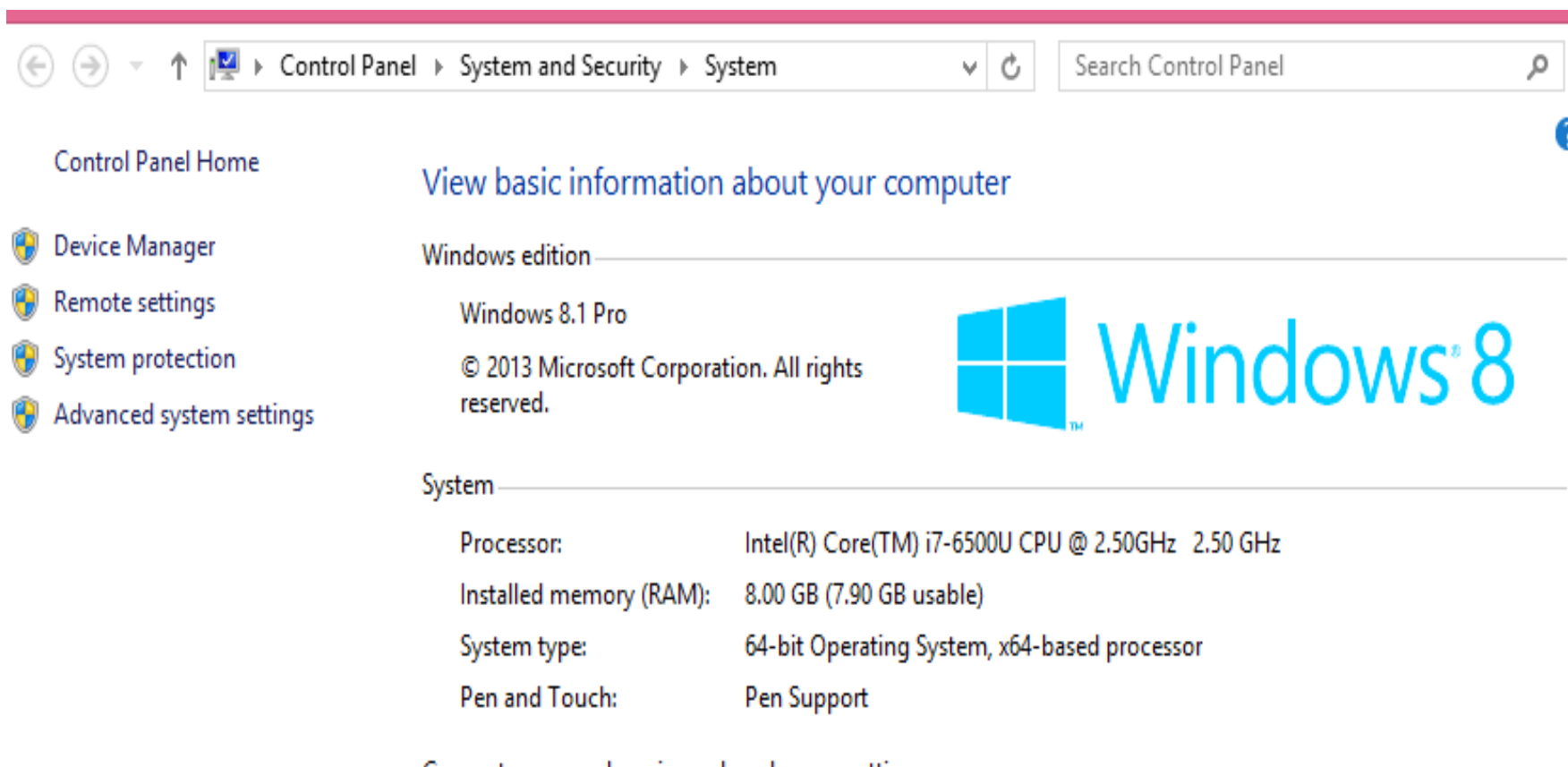
## ○ Processor:



- Intel i5-i9 (recommended i7)
- Recommended 9<sup>th</sup> generations.



# LAPTOP SPECIFICATION



The screenshot shows the Windows 8.1 Pro System Control Panel. The breadcrumb trail at the top reads: Control Panel > System and Security > System. Below this, the left sidebar contains links to Control Panel Home, Device Manager, Remote settings, System protection, and Advanced system settings. The main content area is titled 'View basic information about your computer' and is divided into two sections: 'Windows edition' and 'System'. The 'Windows edition' section displays 'Windows 8.1 Pro' and the copyright notice '© 2013 Microsoft Corporation. All rights reserved.' alongside the Windows 8 logo. The 'System' section lists the following specifications: Processor: Intel(R) Core(TM) i7-6500U CPU @ 2.50GHz 2.50 GHz; Installed memory (RAM): 8.00 GB (7.90 GB usable); System type: 64-bit Operating System, x64-based processor; and Pen and Touch: Pen Support.

Control Panel > System and Security > System

Search Control Panel

Control Panel Home


- Device Manager
- Remote settings
- System protection
- Advanced system settings

### View basic information about your computer

**Windows edition**

Windows 8.1 Pro

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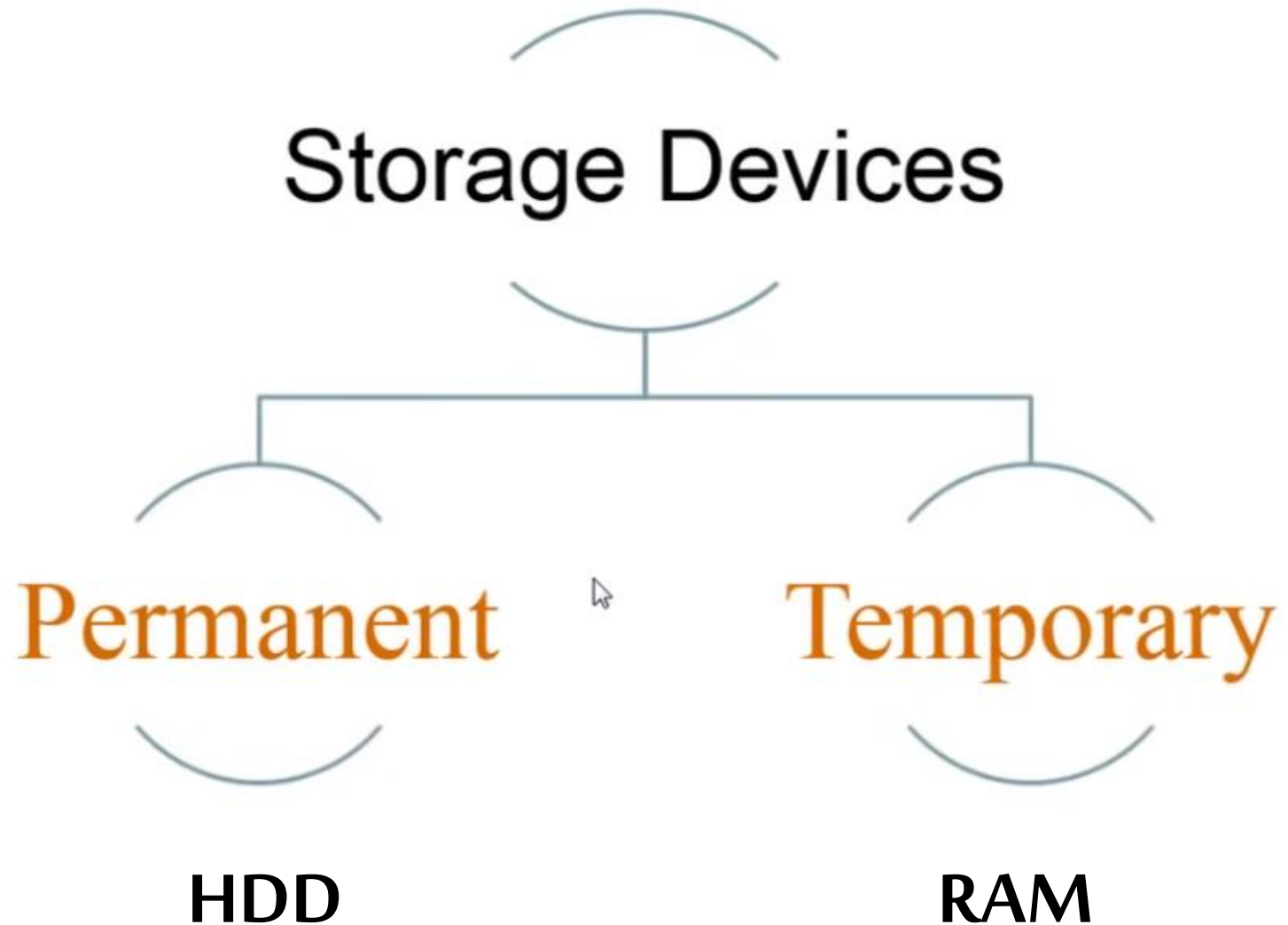
**System**

|                         |   |
|-------------------------|---|
| Processor:              | Intel(R) Core(TM) i7-6500U CPU @ 2.50GHz 2.50 GHz |
| Installed memory (RAM): | 8.00 GB (7.90 GB usable)                          |
| System type:            | 64-bit Operating System, x64-based processor      |
| Pen and Touch:          | Pen Support                                       |

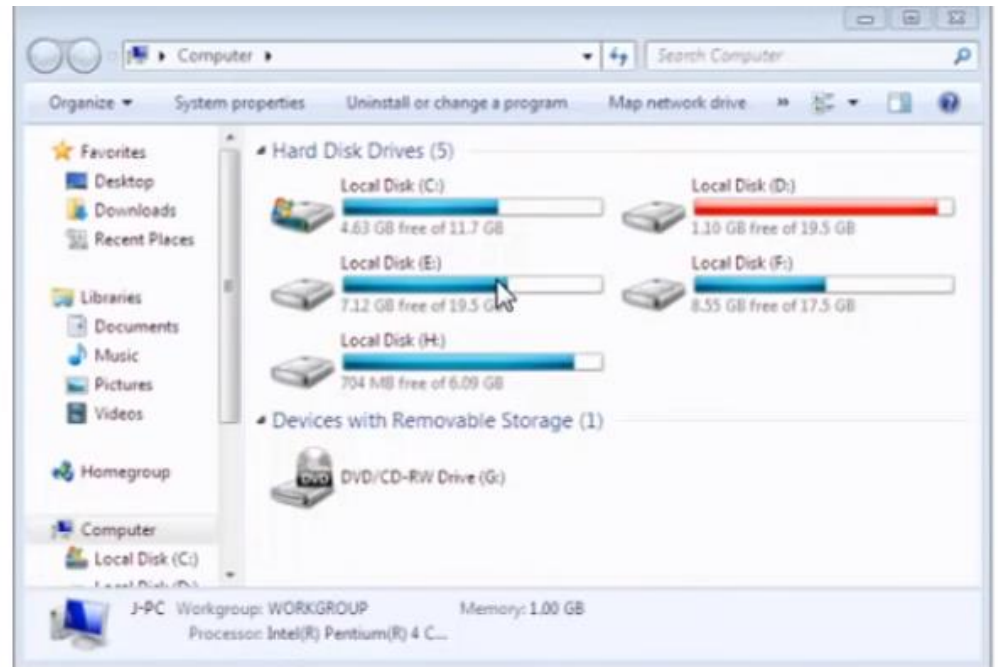
# ▼ LAPTOP SPECIFICATION

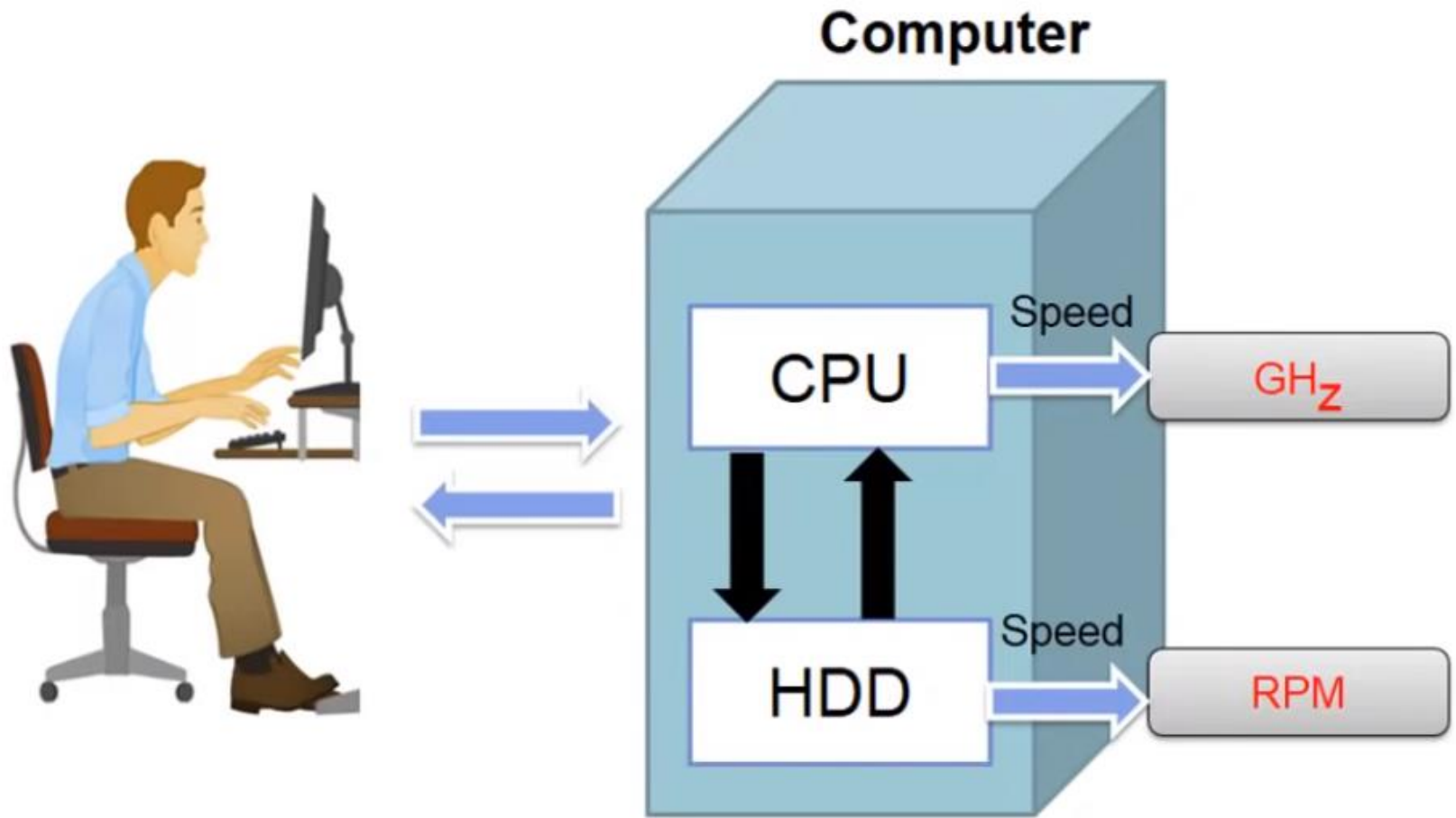
- Screen size: 14" or 15" is recommended, 13 " is minimum.

# Storage Devices

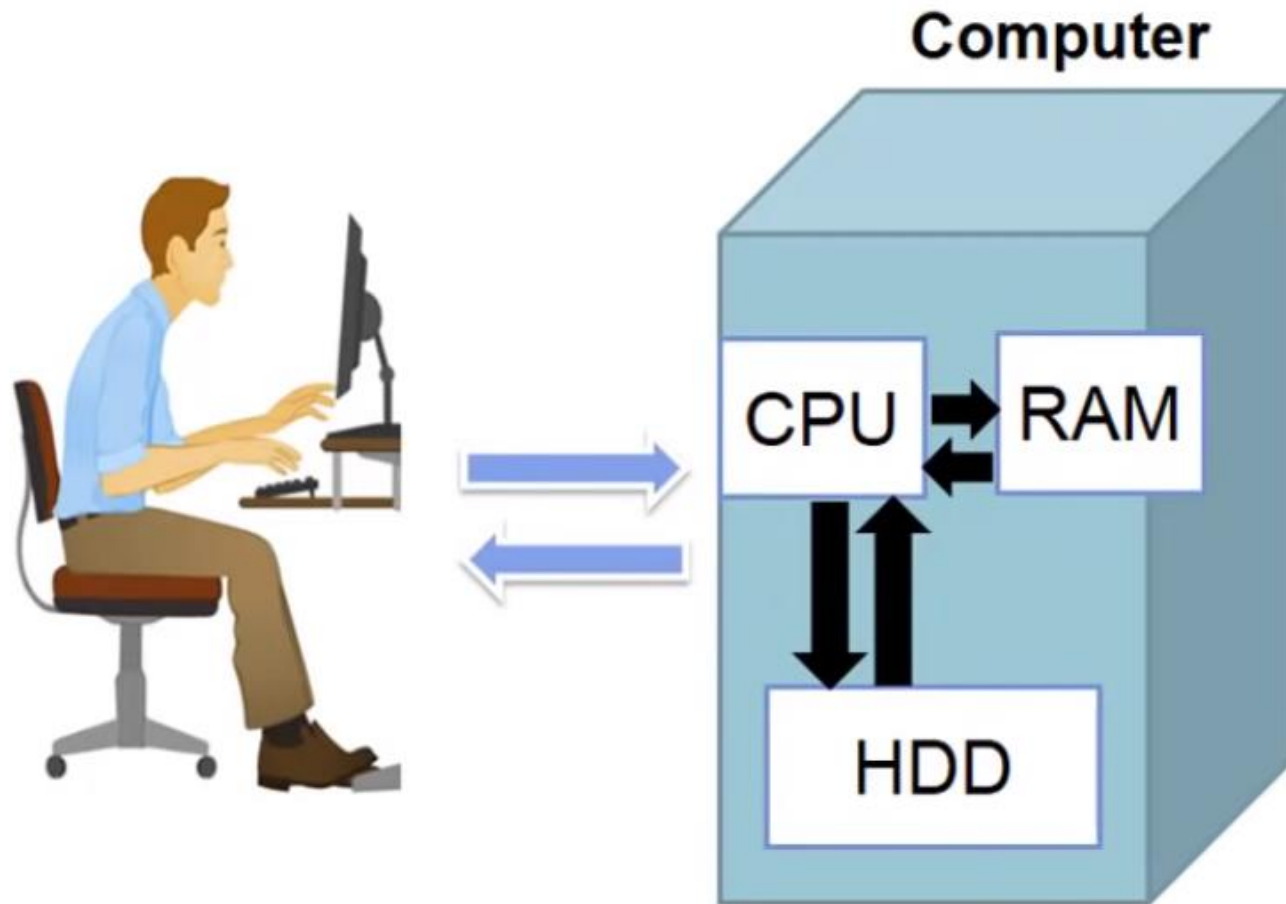


# HDD









CPU



RAM

HDD



CPU



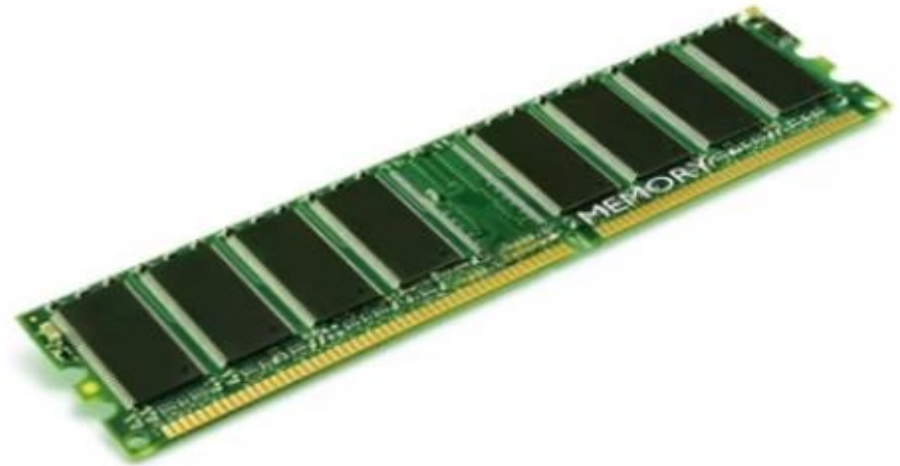
HDD



RAM

# RAM

- RAM stands for *Random Access Memory*
- RAM is a volatile memory



# Measurement Of Storage Capacity

