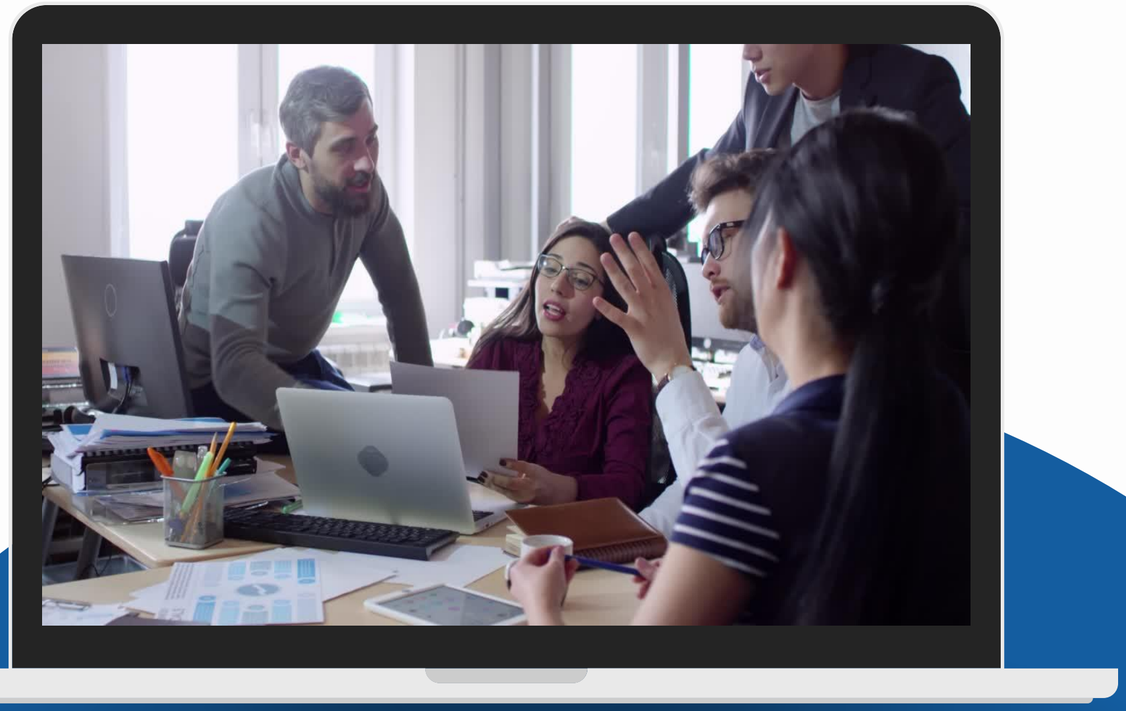
Understanding Windows, macOS, and Linux Operating Systems



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Welcome to our beginner's guide on popular operating systems! We'll explore Windows, macOS, and Linux. This presentation will give you a solid understanding of their differences. bt

What is an Operating System?

- **Resource Manager**
- **Service Provider**
- **Mediator**

Windows Operating System

Widespread Usage

Windows is the most widely used operating system globally, developed by Microsoft

User-Friendly

User-Friendly Interface, It offers an intuitive interface suitable for users of all skill levels

Extensive Compatibility

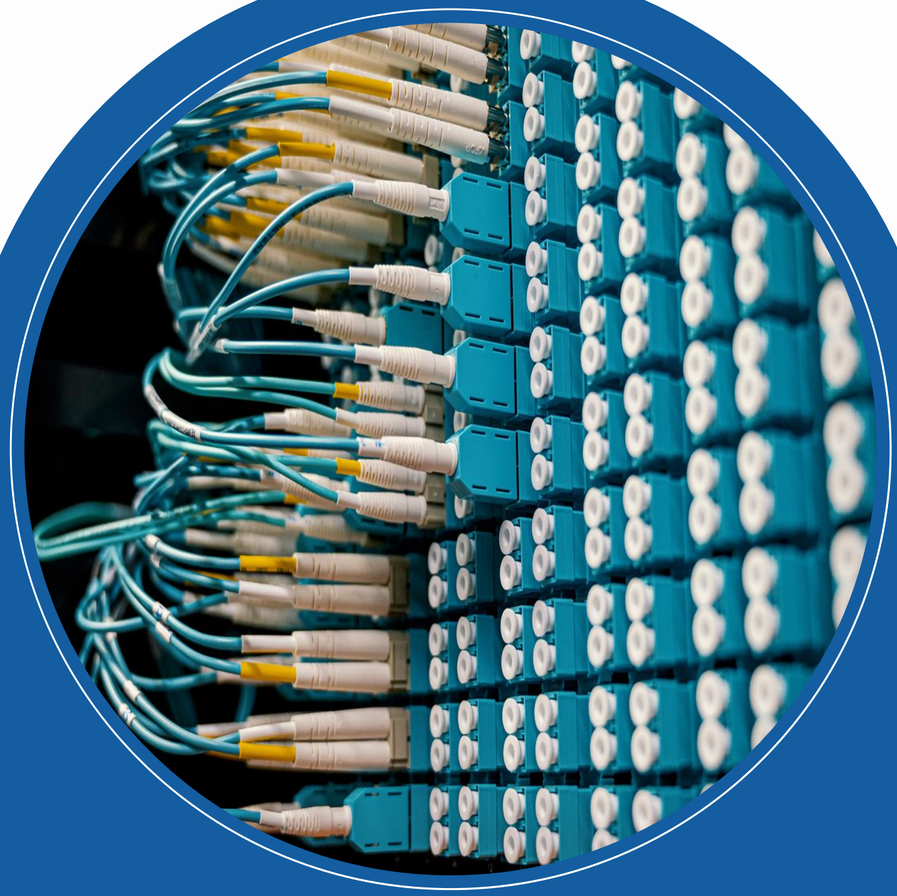
Windows supports a wide range of hardware and software applications

Windows Features

- File Management
- Virtual Assistant
- App Store

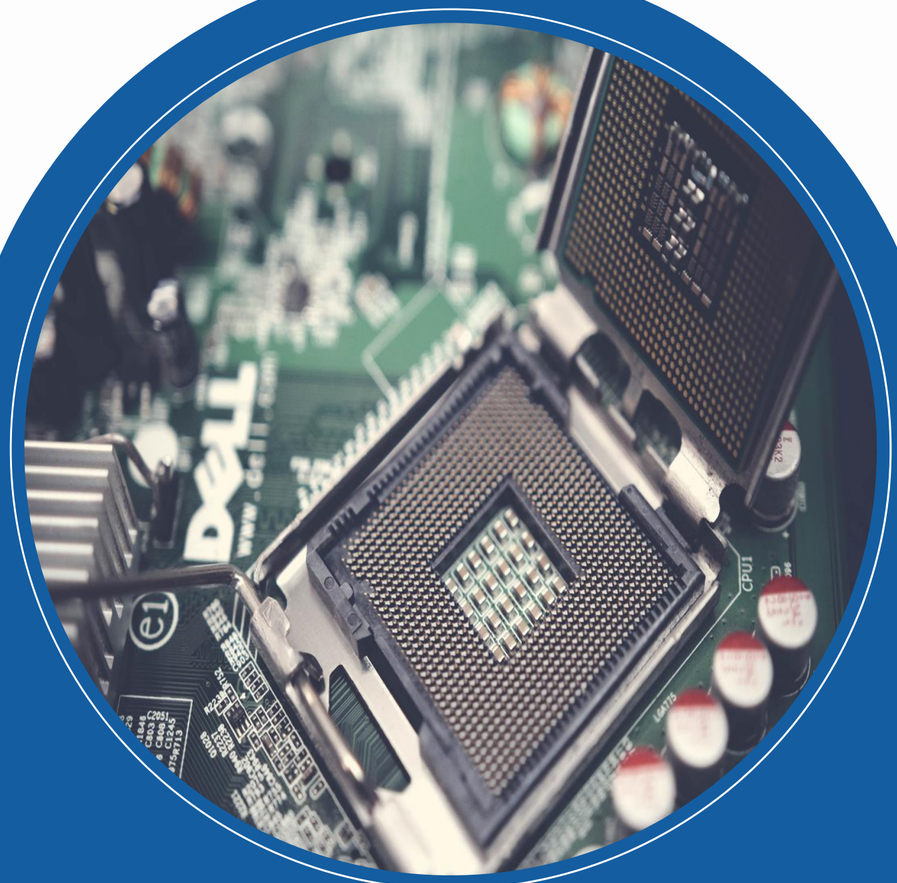
macOS Operating System

- Apple Exclusive
- Sleek Design
- High Performance



macOS Features

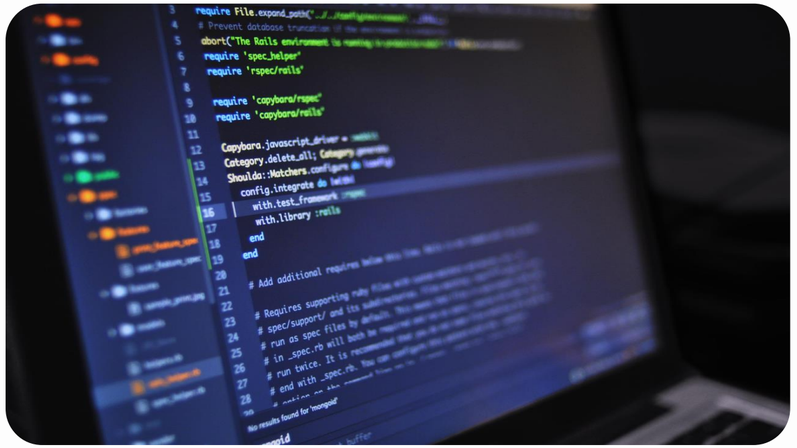
- Finder
- Spotlight
- iCloud Integration



Linux Operating System

Open-Source

Linux is a free, open-source operating system developed by Linus Torvalds.



Customizable

It offers high flexibility and customization options for users.

Versatile

Linux runs on a wide range of hardware, from smartphones to supercomputers

Linux Features

Distributions

Various Linux distributions cater to different user needs and preferences.

Package Managers

Easy software installation and management through package managers.

Terminal

Powerful command-line interface for advanced users and developers.

Comparing Operating Systems

Feature	Windows	macOS	Linux
Ease of Use	High	High	Varies
Compatibility	Wide	Limited	Moderate
Security	Moderate	High	High
Cost	Paid	Included with Mac	Free

Choosing the Right OS: Windows

01

User-Friendly Ideal for beginners and general users.

02

Gaming Excellent for gaming enthusiasts.

03

Business Widely used in corporate environments

Choosing the Right OS: macOS

01

Creative Work
Popular among designers and artists.

02

Security Known for strong built-in security features.

03

Apple Ecosystem Seamless integration with other Apple devices

Choosing the Right OS: Linux

Development

Preferred by many programmers and developers.

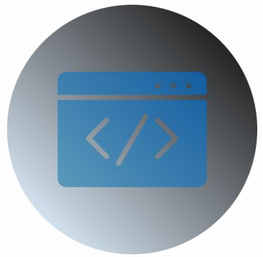
Servers

Widely used for web servers and cloud computing

Customization

Ideal for users who want full control over their OS

Factors to Consider When Choosing an OS



Technical Expertise

Budget

Hardware Requirements

PARTITIONING AND DISK MANAGEMENT IN OPERATING SYSTEMS

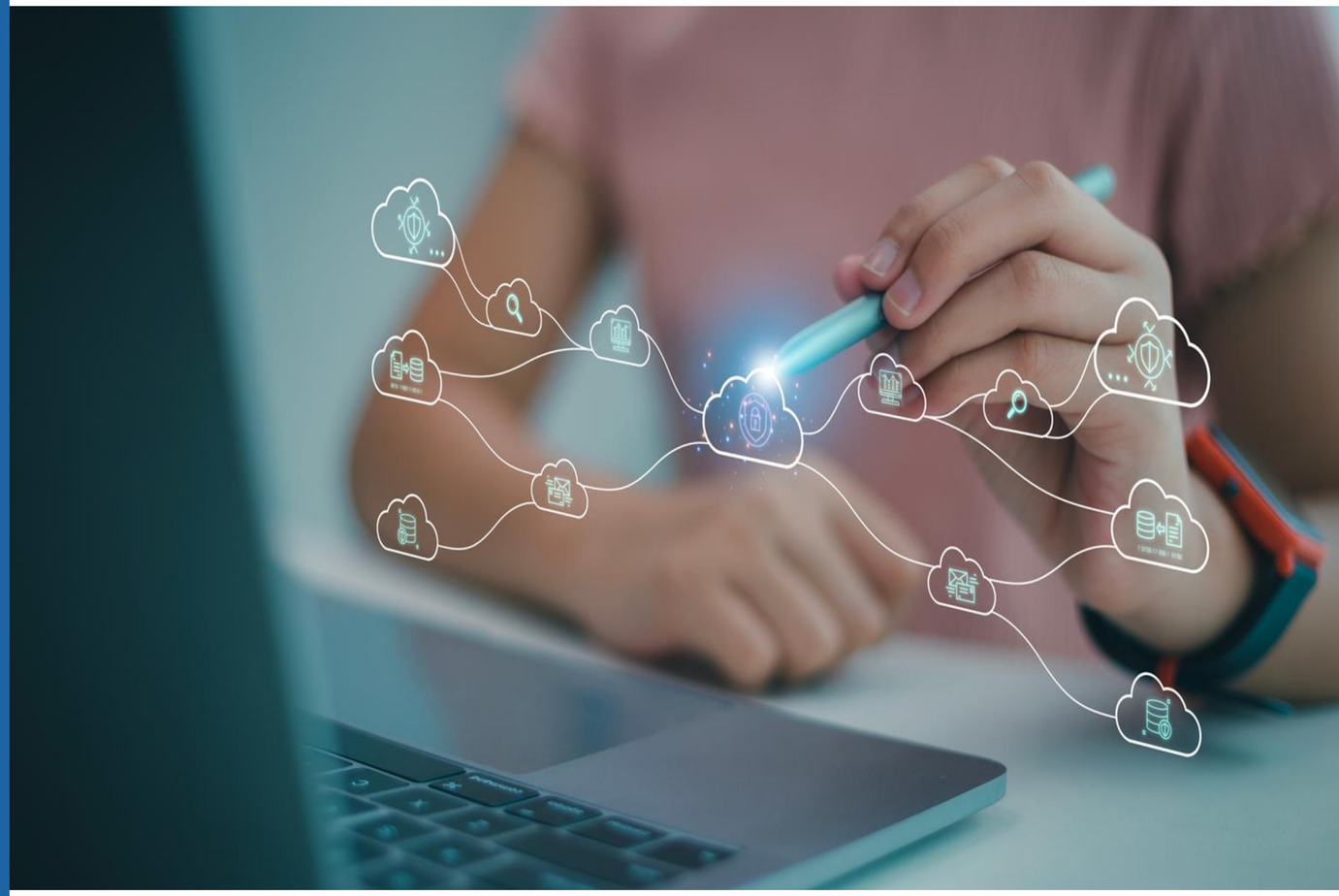
Welcome to our beginner's guide on partitioning and disk management in operating systems. We'll explore these concepts in simple terms, making them easy to understand for everyone.

WHAT IS A HARD DRIVE?

A hard drive is the main storage device in your computer. It's like a digital filing cabinet for all your data. It stores all your files, programs, and even the operating system itself. Everything you save lives here.Without a hard drive, your computer wouldn't be able to retain information when powered off. It's crucial for functionality

Understanding Storage Capacity

- Gigabytes (GB)
- Terabytes (TB)
- Comparing Sizes



What is Partitioning?

1. NTFS Used by Windows, NTFS offers advanced features like file compression and encryption.

2 .EXT4 Common in Linux systems, EXT4 provides robust performance and reliability.

What is Partitioning?

3 FAT32 An older system, FAT32 is compatible with many devices but has size limitations.

4.exFAT Designed for flash drives, exFAT balances compatibility and large file support.

Benefits of Partitioning

Better Organization

Multiple Operating Systems

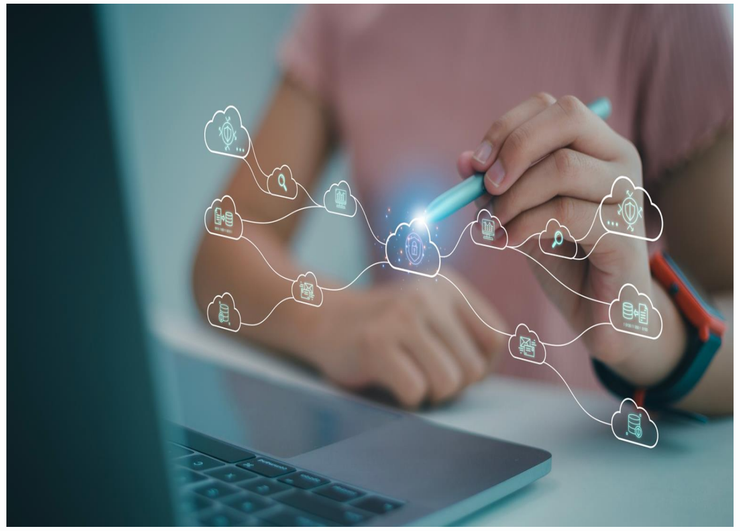
Easier Backups

Potential Performance Boost

Common Partition Types

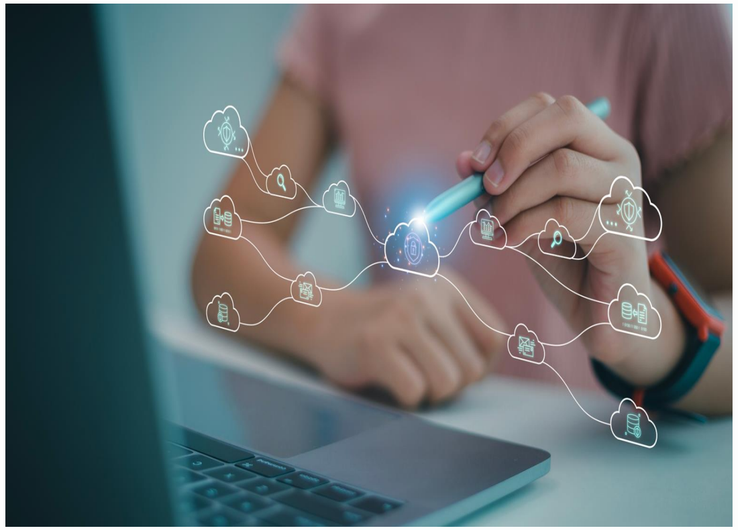
- Primary
- Extended
- Logical

DISK MANAGEMENT TOOLS: WINDOWS



- **Access Disk Management**
- **View Disk Information**
- **Perform Actions**

DISK MANAGEMENT TOOLS: MAC



- **Accessing Disk Utility**
- **Viewing Disks**
- **Available Actions**

Disk Management Tools: Linux

01

GParted GParted is a popular graphical partition editor for Linux systems. It's user-friendly and powerful.

02

Features GParted allows you to create, delete, resize, move, and copy partitions with various file systems.

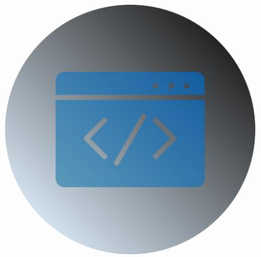
03

Caution Always backup your data before using any partition editor. Mistakes can lead to data loss.

Creating a Partition: Step-by-Step

- Open Disk Management
- Select Unallocated Space
- Set Size
- Assign Drive Letter
- Format Partition

Formatting a Partition



Definition

Choosing a File System

Quick vs Full Format

Best Practices for Disk Management

01

Regular Backups Always keep backups of your important data. Use external drives or cloud storage for added safety.

02

Defragmentation Regularly defragment your hard drive to improve performance, especially for mechanical drives.

03

Keep Updated Regularly update your operating system and disk management tools for the best performance and security.

Troubleshooting Common Issues

Issue	Possible Cause	Solution
"Disk Full" Error	Insufficient free space	Delete unnecessary files or resize partition
Corrupted Partition	Software/hardware failure	Use disk repair tools or seek professional help
Accidental Deletion	User error	Use data recovery software or restore from backup

Future Trends in Disk Management

- Cloud Integration
- AI-Driven Optimization
- Advanced File Systems
- Quantum Storage

EXCEL SHEET MANAGEMENT: A BEGINNER'S GUIDE

Welcome to our comprehensive guide on Excel sheet management! This presentation will equip you with essential skills to organize and manage data effectively in Excel. Whether you're a student or professional, these basics will boost your productivity

Creating a New Excel Sheet

01 Open Excel

02 Click 'File

03 Select 'New'

Excel Sheet Structure

01 Rows

02 Columns

03 Cells

Entering Data

- Select a Cell
  - Type Your Data
- Confirm Entry
- Navigate Cells

Formatting Cells: Text

Font

Alignment

Bold/Italic/Underline

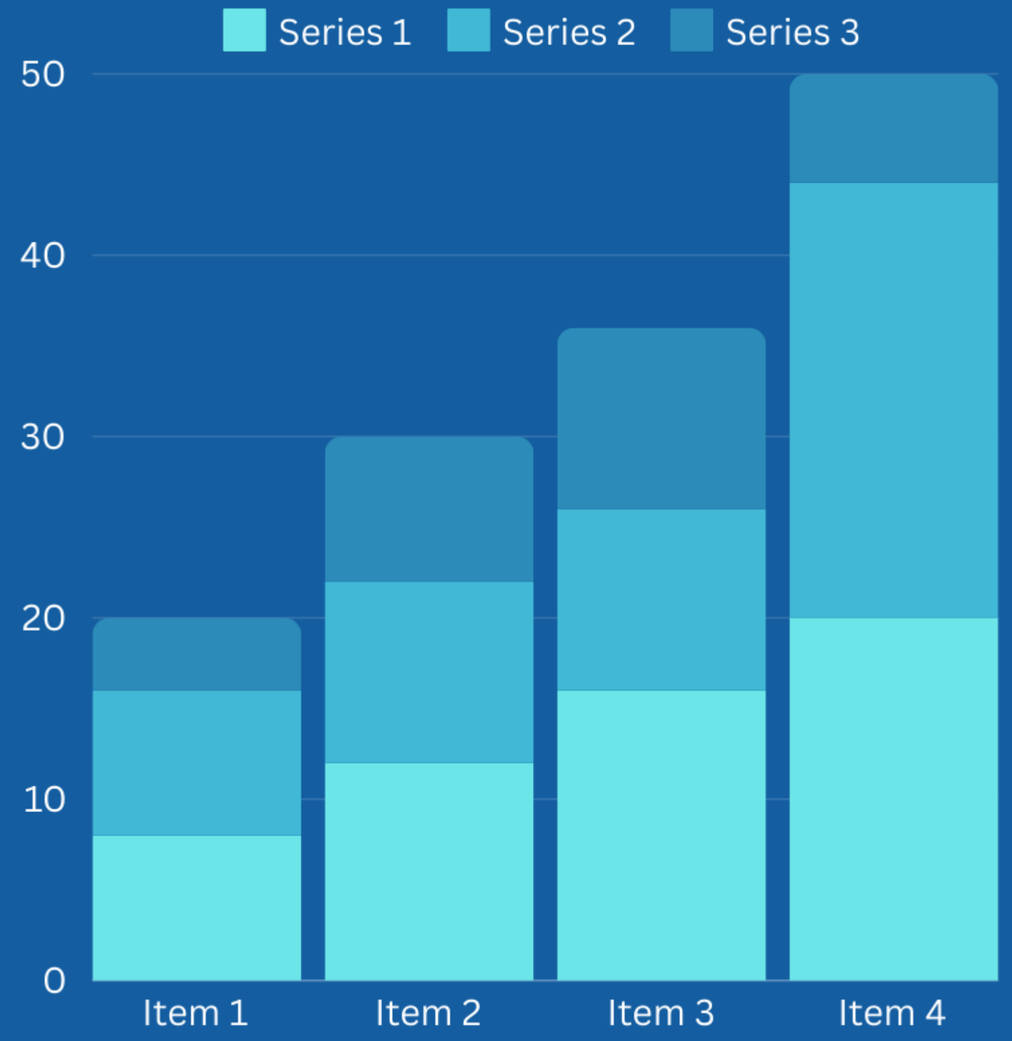
Wrap Text

Formatting Cells: Numbers

Format	Example	Description
General	1000	Default number format
Currency	$1,000.00	Adds currency symbol and decimals
Percentage	100.00%	Displays as percentage with decimals
Date	1/1/2023	Shows as date in various formats

Creating a Budget Sheet: Setup

- Create Headers
- List Categories
- Add Data
- Format Cells



Creating a Budget Sheet: Calculations

- Select Total Cell
- Enter Formula
- Select Range
- Confirm Formula

Basic Excel Functions

SUM

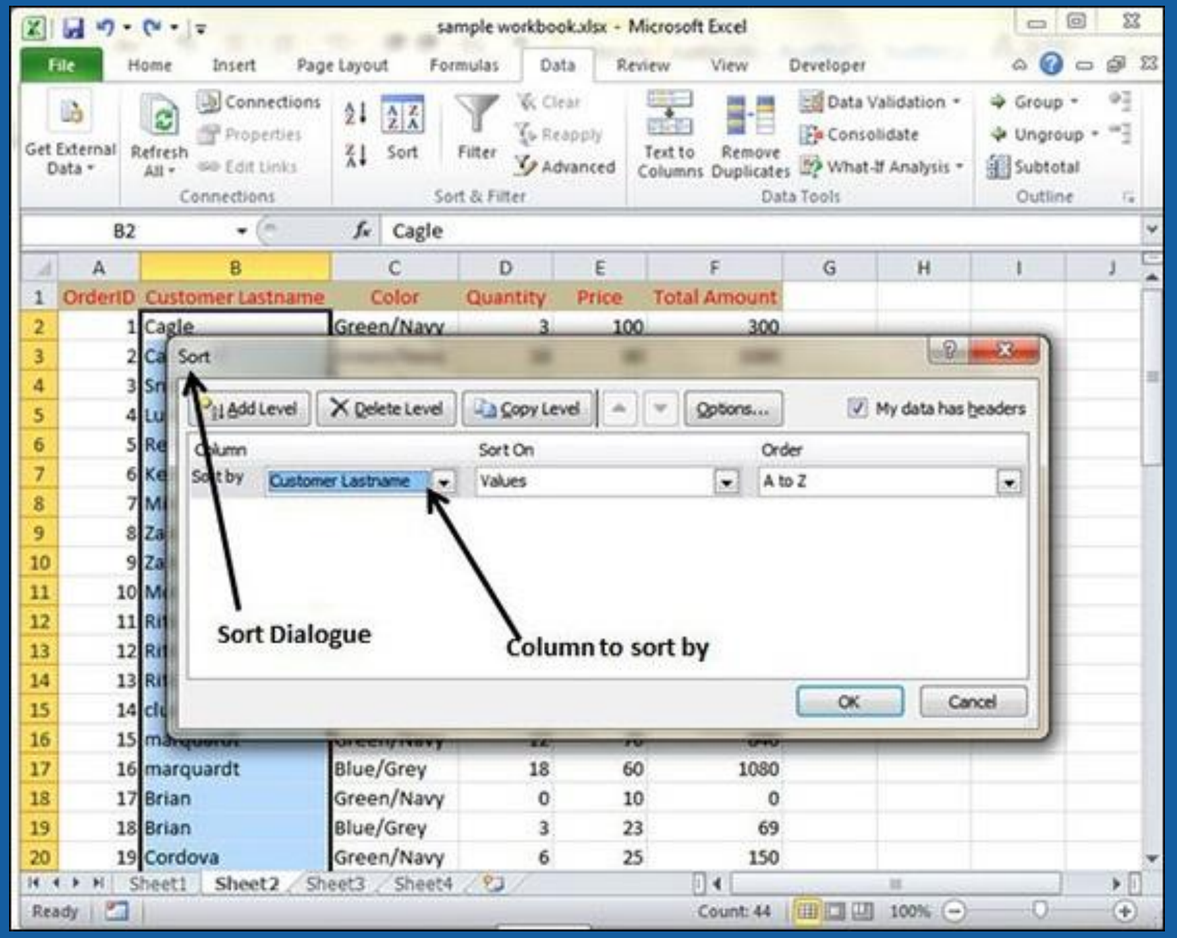
AVERAGE

COUNT

MAX/MIN

Sorting Data

- Select Data
- Find Sort Button
- Choose Column
- Pick Order



Filtering Data

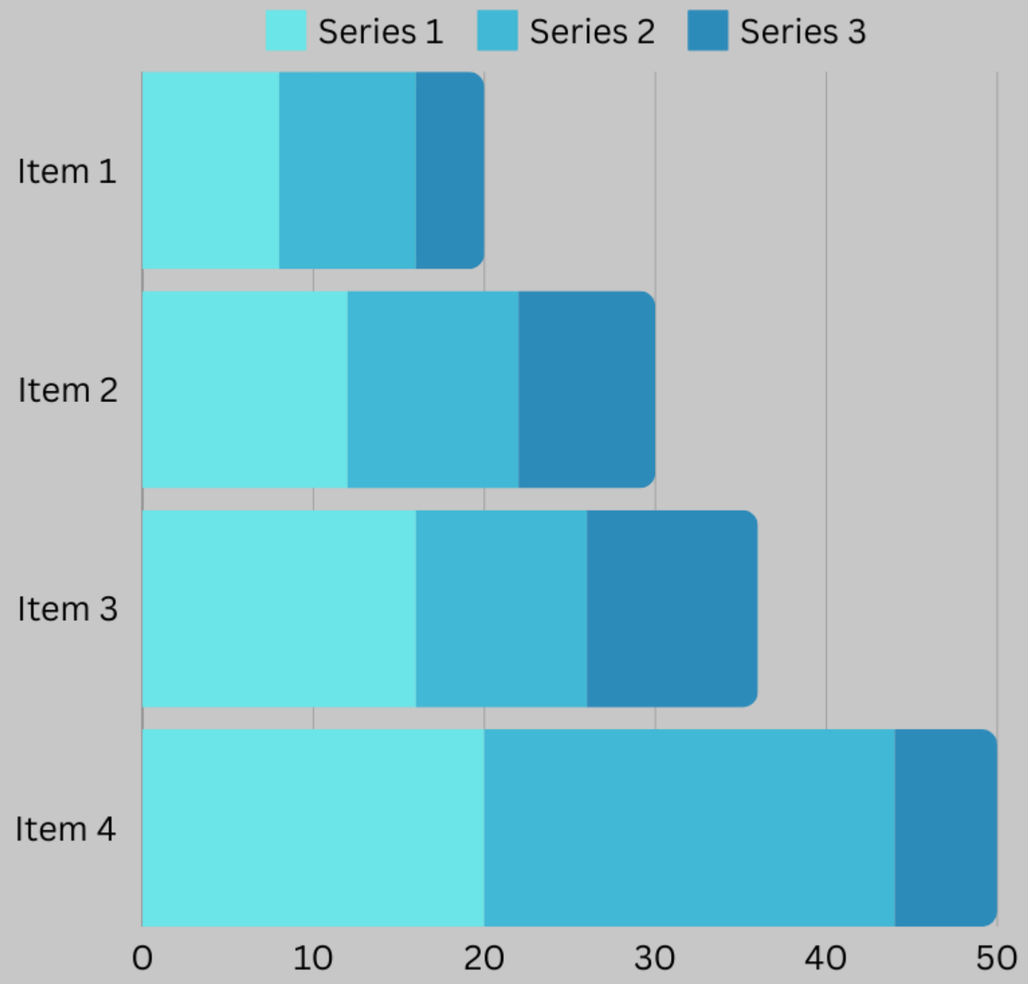
01 Enable Filters

02 Use Dropdowns

03 Apply Filters

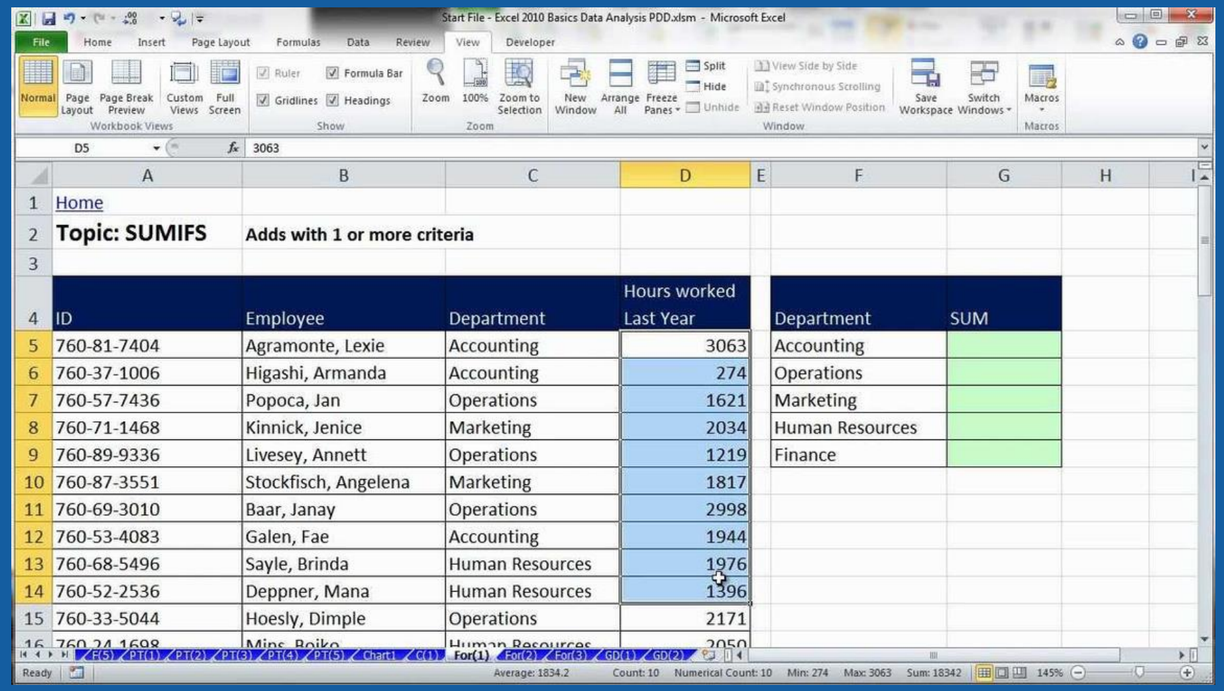
Creating Charts

- Select Data
- Insert Chart
- Customize
- Position

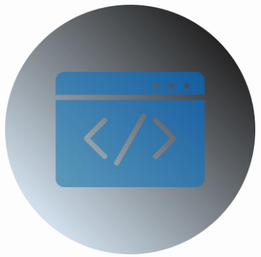


Homework Problem: Budget Sheet

- Create Sheet
- Enter Data
- Use Formulas
- Format Cells



Q&A Session



Open Floor

Topics

Clarifications

Thank You

Reference:.....