

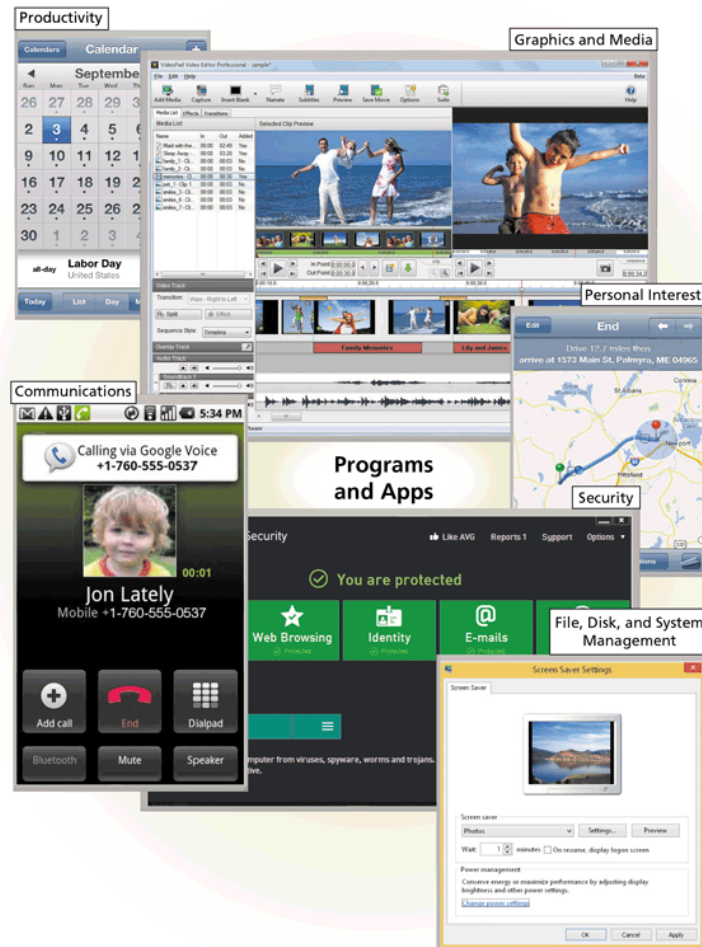
PROGRAMS AND APPS

Malik Adnan Jaleel

Programs and Apps

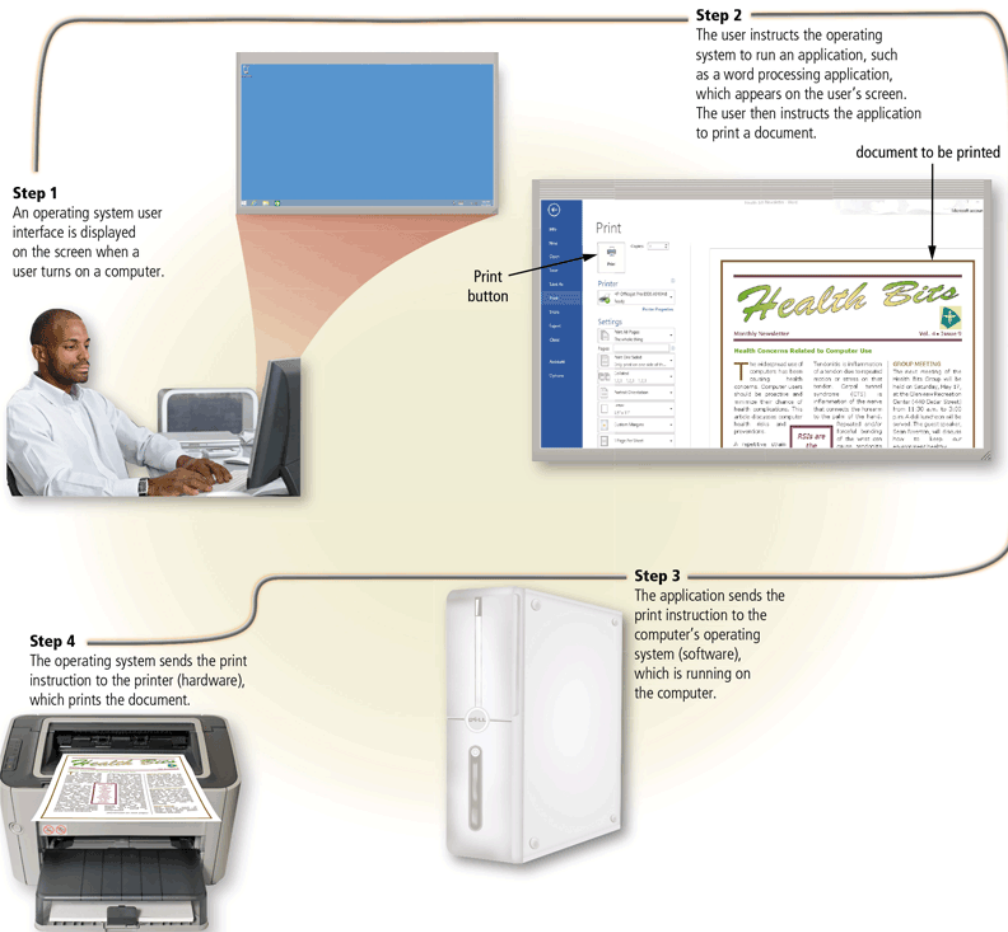
- A **program**, or **software**, consists of a series of related instructions, organized for a common purpose, that tells the computer what tasks to perform and how to perform them
- An **application**, or **app**, sometimes called application software, consists of programs designed to make users more productive and/or assist them with personal tasks
- An operating system is a set of programs that coordinates all the activities among computer or mobile device hardware
 - ▣ Tools and activities
 - ▣ System software

Programs and Apps



Programs and Apps

An Example of How an Operating System Interacts with a User, an Application, and Hardware



Programs and Apps

- Software is available in a variety of forms:

Retail	Custom	Web app
Mobile app	Mobile web app	Shareware
Freeware	Open source	Public domain

Productivity Applications

- Productivity applications can assist you in becoming more effective and efficient while performing daily activities at work, school, and home

Word processing	Presentation	Spreadsheet	Database	Note taking
Calendar and contact management	Project management	Accounting	Personal finance	Legal
	Tax preparation	Document management	Enterprise computing	

Productivity Applications

- With productivity applications, users often:



Create a
project

Edit a
project

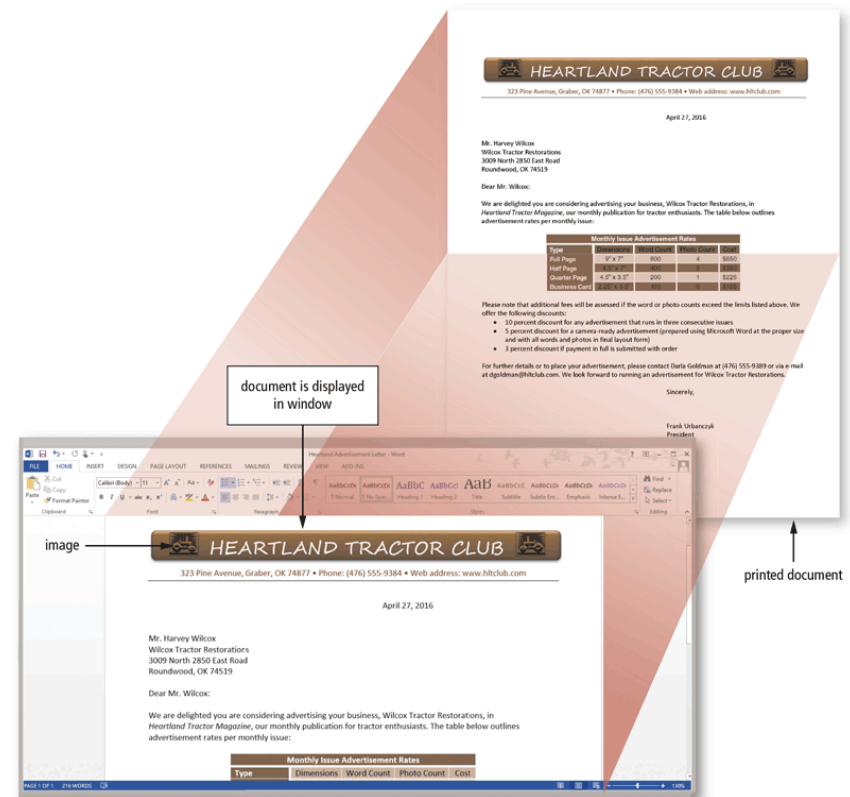
Format a
project

Save a
project

Distribute
a project

Productivity Applications

- **Word processing software** allows users to create and manipulate documents
- A major advantage of using word processing software is that it enables users to change their written words easily



Productivity Applications

- **Presentation software** allows users to create visual aids for presentations to communicate ideas, messages, and other information to a group



Productivity Applications

- **Spreadsheet software** allows users to organize data in columns and rows and perform calculations on the data

formula assigned to active cell contains a function

rows 3, 4, 5, and 6

columns J, K, L

cell B4

cell B17 is active

Personal Budget Worksheet
Monthly Estimates

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Income													
Wages	\$1,000.29	\$1,000.29	\$1,000.29	\$1,000.29	\$1,000.29	\$1,000.29	\$1,000.29	\$1,000.29	\$1,000.29	\$1,000.29	\$1,000.29	\$1,000.29	\$12,003.48
Dividends	4,000.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4,000.75	0.00	0.00	0.00	8,001.50
Total	\$5,001.04	\$1,000.29	\$1,000.29	\$1,000.29	\$1,000.29	\$1,000.29	\$1,000.29	\$1,000.29	\$5,001.04	\$1,000.29	\$1,000.29	\$1,000.29	\$20,004.98
Expenses													
Rent	\$400.89	\$400.89	\$400.89	\$400.89	\$400.89	\$400.89	\$400.89	\$400.89	\$400.89	\$400.89	\$400.89	\$400.89	\$4,810.68
Food	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	3,600.00
Tuition	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	3,000.00
Books	500.00	0.00	0.00	0.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	1,000.00
Entertainment	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	1,200.00
Car Payment	154.79	154.79	154.79	154.79	154.79	154.79	154.79	154.79	154.79	154.79	154.79	154.79	1,857.48
Gas	100.00	100.00	100.00	100.00	150.00	150.00	150.00	100.00	100.00	100.00	100.00	100.00	1,350.00
Miscellaneous	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	1,200.00
Total	\$3,155.68	\$1,155.68	\$1,155.68	\$1,155.68	\$1,205.68	\$1,205.68	\$1,205.68	\$3,155.68	\$1,155.68	\$1,155.68	\$1,155.68	\$1,155.68	\$18,018.16
Net	\$1,845.36	(\$155.39)	(\$155.39)	(\$155.39)	(\$205.39)	(\$205.39)	(\$205.39)	(\$2,155.39)	\$3,845.36	(\$155.39)	(\$155.39)	(\$155.39)	\$1,986.82

=SUM(B9:B16)

Comments Share

Monthly Expenses Monthly Budget Planner

=SUM(B9:B16)

Productivity Applications

- A **database** is a collection of data organized in a manner that allows access, retrieval, and use of that data
- **Database software** allows users to create, access, and manage a database

The screenshot shows the Microsoft Access interface with two tables displayed in Datasheet View. The 'Customer' table is at the top, and the 'Book Rep' table is at the bottom. Annotations with arrows point to specific parts of the tables:

- fields**: Points to the column headers of the 'Customer' table.
- records**: Points to a row of data in the 'Customer' table.
- Book Rep table**: Points to the 'Book Rep' table header.
- common BR # field relates the Customer table to the Book Rep table**: Points to the 'BR #' column in the 'Book Rep' table, which is highlighted in yellow.

Customer Table Data:

CU #	Customer Name	Street	City	State	Postal Code	Amount Paid	Current Due	Returns	BR #
ASU37	Applewood State University	300 University Ave.	Greer	PA	19158	\$41,530.98	\$38,812.66	\$12,008.02	42
BCJ21	Brodin Junior College	4806 Park Dr.	Greer	PA	19158	\$0.00	\$6,081.98	\$0.00	42
CSD25	Cowpens ISD	829 Wooster Ave.	Gossett	PA	19157	\$12,750.00	\$13,275.00	\$2,000.00	53
CSU10	Camellia State University	725 Camellia St.	Pleasantburg	NJ	07025	\$63,246.88	\$69,847.76	\$14,967.98	53
DCC34	Dartt Community College	3827 Burgess Dr.	Chambers	NJ	07037	\$21,345.50	\$23,467.75	\$4,496.80	65
FSC12	First State College	7300 Cedar Rd.	Quaker	DE	19719	\$34,557.25	\$23,875.98	\$7,234.99	65
FSU23	Farnham State University	1445 Hubert St.	Gaston	DE	19723	\$18,268.00	\$22,024.50	\$3,496.23	42
HSD05	Hammonds County ISD	446 Lincoln Blvd.	Chesnee	NJ	07053	\$18,434.75	\$0.00	\$0.00	53
KCC78	Key Community College System	7523 Penn Ave.	Adelphia	PA	19159	\$21,288.65	\$11,367.49	\$2,256.98	65
MCC45	Mauldin Community College	72 Montrose St.	Chesnee	NJ	07053	\$9,500.00	\$5,000.00	\$0.00	53
MEC56	Mehitable College	202 College St.	Gaston	DE	19723	\$9,111.19	\$7,310.76	\$574.25	42
LU22	PrattLast Institute	236 Ashton Ave.	Pleasantburg	NJ	07025	\$17,229.45	\$11,769.75	\$3,450.50	53
CC77	Stallone Community College	1200 Franklin Blvd.	Adelphia	PA	19156	\$7,525.98	\$2,515.78	\$0.00	42
EC19	Seaborn College	345 Mather Rd.	Quaker	DE	19719	\$9,225.34	\$10,496.89	\$2,017.67	65
SC02	Tri-State Consortium	3400 Metro Pkwy.	Adelphia	PA	19156	\$34,578.90	\$9,432.56	\$943.34	65

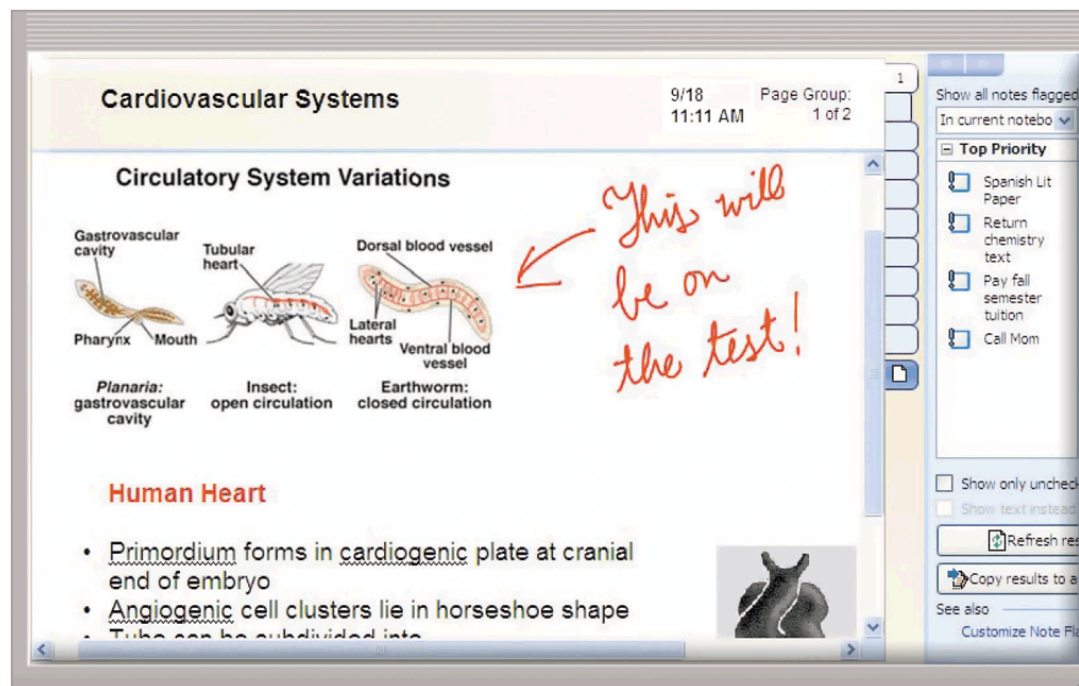
Book Rep Table Data:

BR #	Last Name	First Name	Street	City	State	Postal Code	Start Date	Salary	Bonus Rate	Click to Add
42	Perez	Melina	261 Porter Dr.	Adelphia	PA	19156	5/14/2012	\$31,500.00	0.20	
48	Statnik	Michael	3135 Simpson Dr	Pleasantburg	NJ	07025	1/15/2013	\$29,000.00	0.20	
53	Chin	Robert	265 Maxwell St.	Gossett	PA	19157	6/1/2013	\$26,250.00	0.19	
65	Rogers	Tracy	1827 Maple Ave.	Adelphia	PA	19159	7/1/2014	\$7,750.00	0.18	
*								\$0.00		

Customer Number (three uppercase letters followed by 2-digit number)

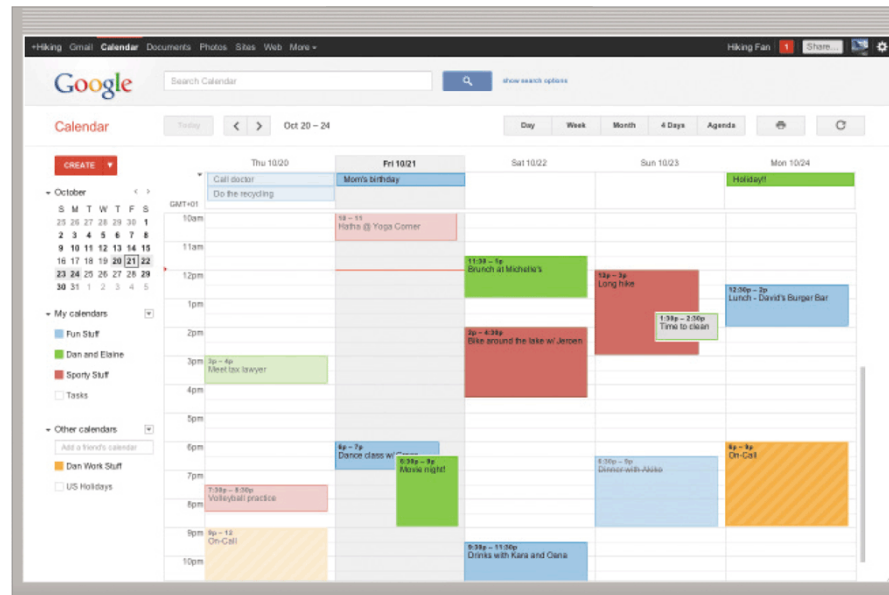
Productivity Applications

- **Note taking software** is an application that enables users to enter typed text, handwritten comments, drawings, sketches, photos, and links anywhere on a page



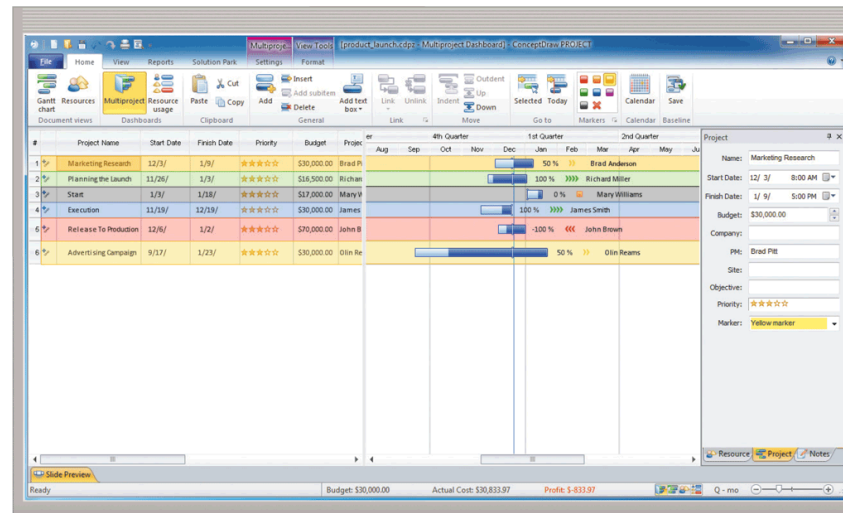
Productivity Applications

- ❑ **Calendar and contact management software** is an application that helps you organize your calendar, keep track of contacts, and share this information with other users



Productivity Applications

- A **software suite** is a collection of individual related applications available together as a unit
- **Project management software** is an application that allows a user to plan, schedule, track, and analyze the events, resources, and costs of a project



Productivity Applications

- **Accounting software** is an application that helps businesses of all sizes record and report their financial transactions

The screenshot displays the QuickBooks Accountant 2013 [US] - [Create Invoices] window. The interface includes a menu bar (File, Edit, View, Lists, Favorites, Accountant, Company, Customers, Vendors, Employees, Banking, Reports, Window, Help) and a toolbar with various icons. The main window is titled "Sample Rock Castle Construction - QuickBooks Accountant 2013 [US] - [Create Invoices]".

The "CUSTOMER/JOB" dropdown is set to "Abercrombie, Kristy". The "CLASS" is "Remodel" and the "TEMPLATE" is "Rock Castl...". The "Invoice" is marked as "PAID 12/15/2017". The "DATE" is "12/10/2017" and the "INVOICE # 1091". The "BILL TO" address is "Kristy Abercrombie, 5647 Cypress Hill Rd, Bayshore CA 94326". The "SHIP TO" address is "Ship To 1, Kristy Abercrombie, 5647 Cypress Hill Rd, Bayshore, CA 94326". The "TERMS" are "Net 30" and the "DUE DATE" is "01/09/2020".

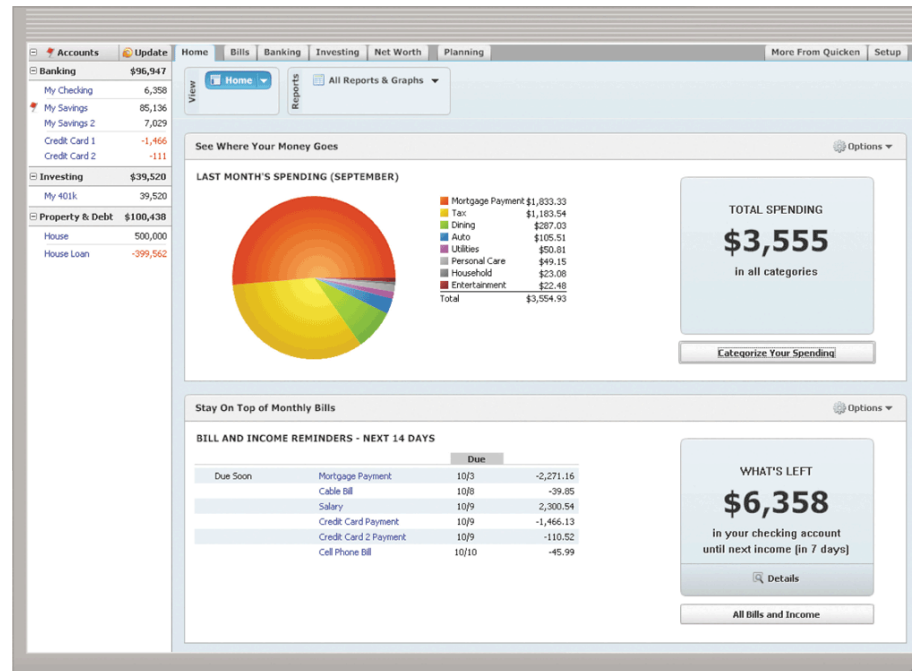
ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT	TAX
Removal	Removal labor	16		45.50	728.00	Non
Subs.Tile &C...	Install tile or counter			825.00	825.00	Non
Subs.Electrical	Electrical work			275.00	275.00	Non
Subs.Painting	Painting			154.00	154.00	Non
Subs.Plumbi...	Plumbing			550.00	550.00	Non

The "ONLINE PAY" dropdown is set to "Off". The "TAX" is "San Tomas" (7.75%) and the "TOTAL" is "4,522.00". The "CUSTOMER MESSAGE" field is empty. The "MEMO" field is empty. The "CUSTOMER TAX CODE" is "Tax". The "Save & Close", "Save & New", and "Revert" buttons are visible.

The right sidebar shows the "Abercrombie, Kristy:Remodel B..." customer profile. The "SUMMARY" section includes: Phone: 415-555-6579, Email: kristy@samplename.com, Open balance: 0.00, Active estimates: 1, Sales Orders to be invoiced: 0, Unbilled time and expenses: 1,910.00. The "RECENT TRANSACTION" section lists: 12/15/17 Payment (7,833.28), 12/12/17 Estimate (7,676.13), 12/10/17 Invoice - Paid (4,522.00), 12/01/17 Credit Memo (711.15), 11/25/17 Invoice - Paid (3,111.28). The "NOTES" section is empty.

Productivity Applications

- **Personal finance software** is a simplified accounting application that helps home users and small/home office users balance their checkbooks, pay bills, track personal income and expenses, verify account balances, transfer funds, track investments, and evaluate financial plans



Productivity Applications

- ❑ **Legal software** is an application that assists in the preparation of legal documents and provides legal information to individuals, families, and small businesses

The screenshot displays the 'MyAttorney HOME & BUSINESS' software interface. The top navigation bar includes icons and labels for 'Get Started', 'Choose Docs', 'Create Docs', 'Manage Docs', 'Advice', 'Library', and 'Finances'. The main window is titled 'Interview: Bill of Sale - Motor Vehicle' and features buttons for 'Show Preview', 'Show Help', and 'Close Interview'.

The 'What motor vehicle is being sold?' section contains input fields for Year, Make, Model, and VIN. Below these fields, an example is provided: 'For example, 1990, Toyota, Camry, 289A5436BH5868.' Navigation buttons 'First', 'Back', 'Next', and 'Bookmark' are located at the bottom of this section.

A preview window titled 'Bill of Sale - Motor Vehicle' is open on the right, showing the following text:

The Bill of Sale - Motor Vehicle is a document under which one or more sellers transfer title rights in a motor vehicle to one or more buyers. This document only represents the transfer of the RIGHT to ownership; the motor vehicle's certificate of title represents ACTUAL ownership. Thus, this document and the certificate of title are needed to complete the transfer of the motor vehicle.

The Bill of Sale - Motor Vehicle should be signed by the seller(s), and becomes effective as of the date provided in the text of the document. The buyer(s) should sign the Bill of Sale - Motor Vehicle immediately below the odometer statement in the document. The buyer(s) should also

The main document area displays the title 'BILL OF SALE - MOTOR VEHICLE' and the following text:

For the consideration of \$5,250.00, Sara Albertson (the "Seller"), of 2887 Fourth Place, Harrington, Indiana 46322, does hereby sell, assign and transfer to Jesse Martinez (the "Buyer"), of 7761 Cedar Road, Riverton, Indiana 46323, the following described motor vehicle (the

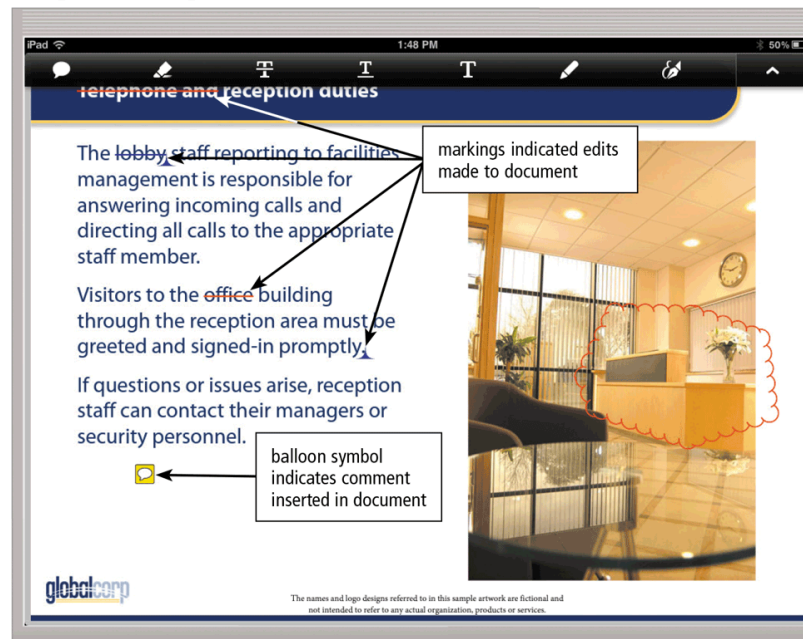
Productivity Applications

- ❑ **Tax preparation software** is an application that can guide individuals, families, or small businesses through the process of filing federal and state taxes

The screenshot displays the TaxACT Deluxe Edition software interface. The left pane shows a tree view of tax forms, with 'Federal Form 1040 - U.S. Individual Income Tax Return' selected. The main window shows the 'Federal Form 1040' form, which is a U.S. Individual Income Tax Return. The form includes fields for personal information (name, address, city, state, ZIP code, foreign country, province, and postal code), filing status (Single, Married filing joint return, Married filing separate return, Head of household, Qualifying widow(er)), student status, and disability status. The 'Filing Status' section is currently set to 'Single'.

Productivity Applications

- **Document management software** is an application that provides a means for sharing, distributing, and searching through documents by converting them into a format that can be viewed by any user



Productivity Applications

- A large organization, commonly referred to as an enterprise, requires special computing solutions because of its size and geographic distribution

Human resources
software

Accounting
software

Engineering or
product
development
software

Manufacturing
software

Marketing
software

Sales software

Distribution
software

Customer service
software

Software for
information
technology staff

Graphics and Media Software



**Computer-aided design
(CAD) software**



**Desktop publishing
software**



**Paint/Image editing
software**

Graphics and Media Software



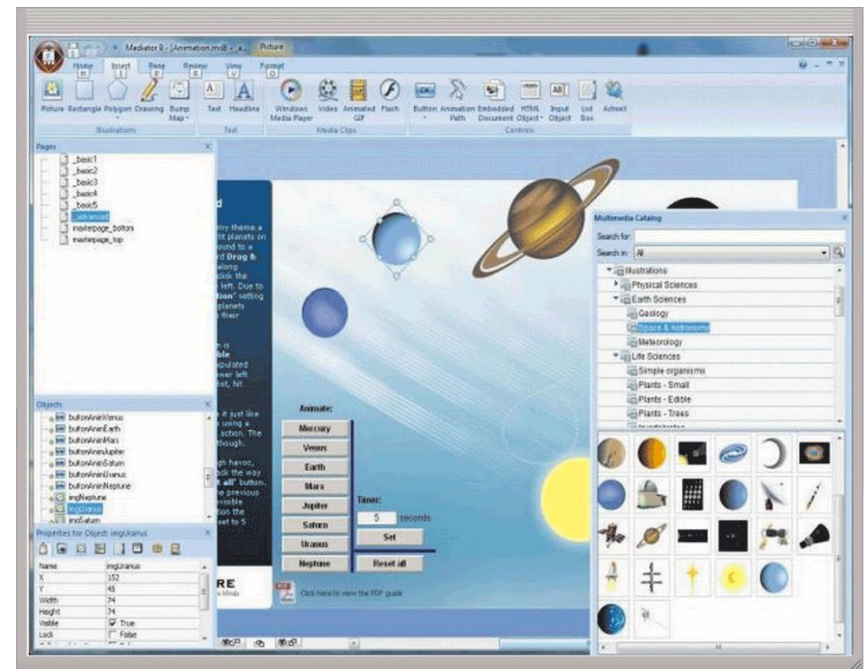
**Photo editing and
photo management
software**



**Video and audio
editing software**

Graphics and Media Software

- ❑ **Multimedia authoring software** allows users to combine text, graphics, audio, video, and animation in an interactive application
- ❑ **Website authoring software** helps users of all skill levels create webpages that include graphics, video, audio, animation, and special effects with interactive content



Graphics and Media Software

- A **media player** is a program that allows you to view images and animations, listen to audio, and watch video files on your computer or mobile device
- **Disc burning software** writes text, graphics, audio, and video files on a recordable or rewritable disc



Personal Interest Applications

Lifestyle
applications

Medical
applications

Entertainment
applications

Convenience
applications

Education
applications

Communications Applications

Blog

Browsing

Chat

Online Discussion

Email

File Transfer

Internet Phone

Instant
Messaging

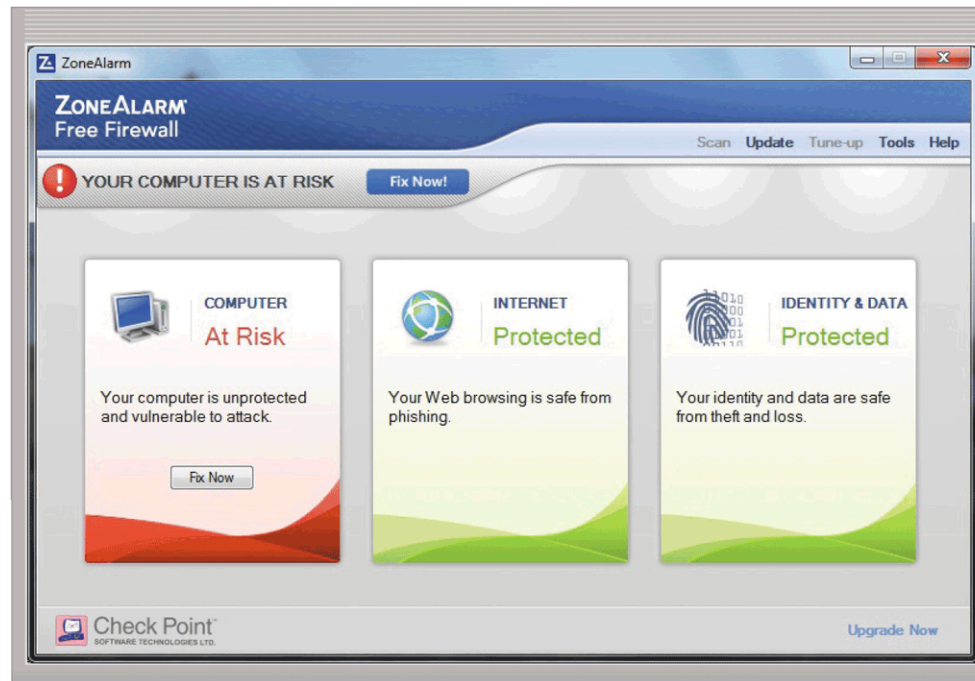
Mobile
Messaging

Videoconference

Web Feeds

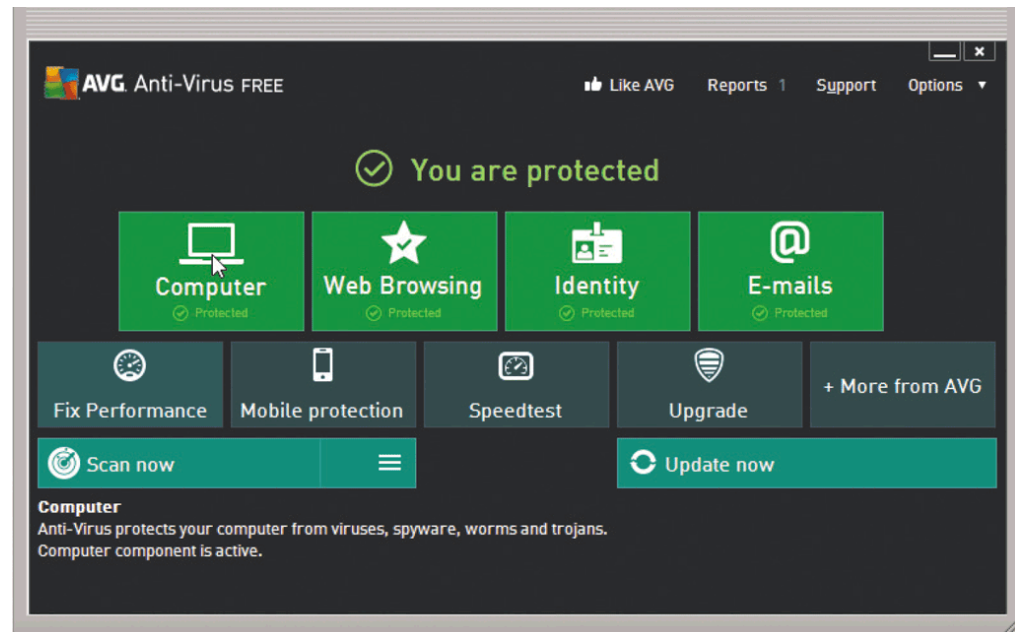
Security Tools

- A **personal firewall** is a security tool that detects and protects a personal computer and its data from unauthorized intrusions



Security Tools

- An **antivirus program** protects a computer against viruses by identifying and removing any computer viruses found in memory, on storage media, or on incoming files



Security Tools

- Spyware is a type of program placed on a computer or mobile device without the user's knowledge that secretly collects information about the user and then communicates the information it collects to some outside source while the user is online
- Adware is a type of program that displays an online advertisement in a banner or pop-up or pop-under window on webpages, email messages, or other Internet services

Security Tools

A **spyware remover** is a type of program that detects and deletes spyware and similar programs

An **adware remover** is a program that detects and deletes adware

Security Tools

**Anti-spam
programs**

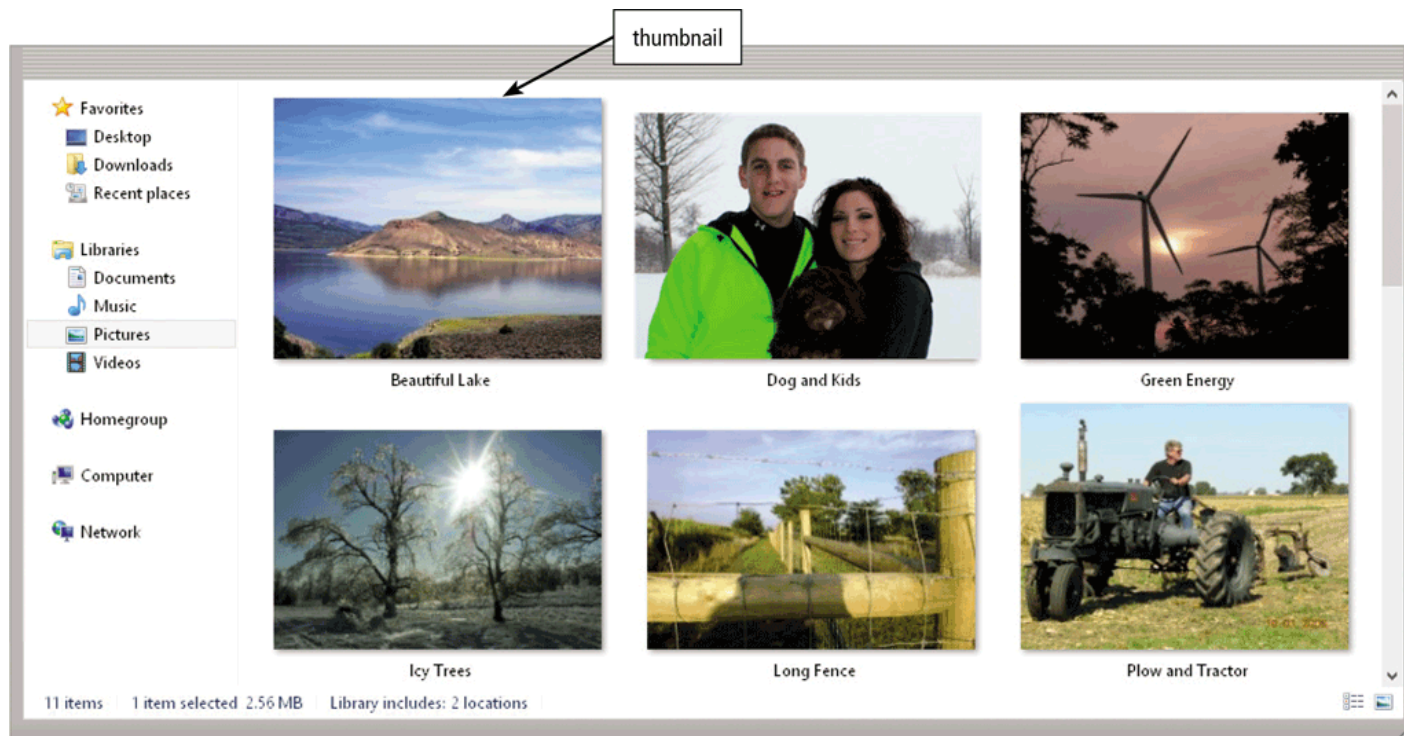
**Web filtering
software**

**Phishing
filters**

**Pop-up and
pop-under
blockers**

File, Disk, and System Management Tools

- A **file manager** is a tool that performs functions related to file management



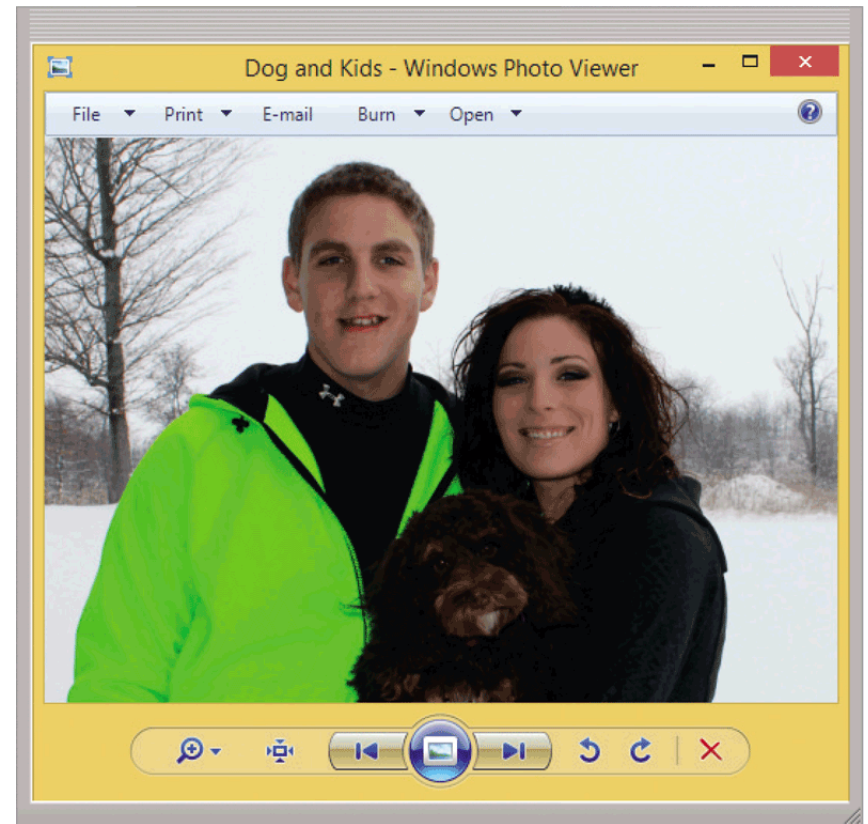
File, Disk, and System Management Tools

- A **search tool** is a program, usually included with an operating system, that attempts to locate a file, contact, calendar event, app, or any other item stored on your computer or mobile device based on criteria you specify



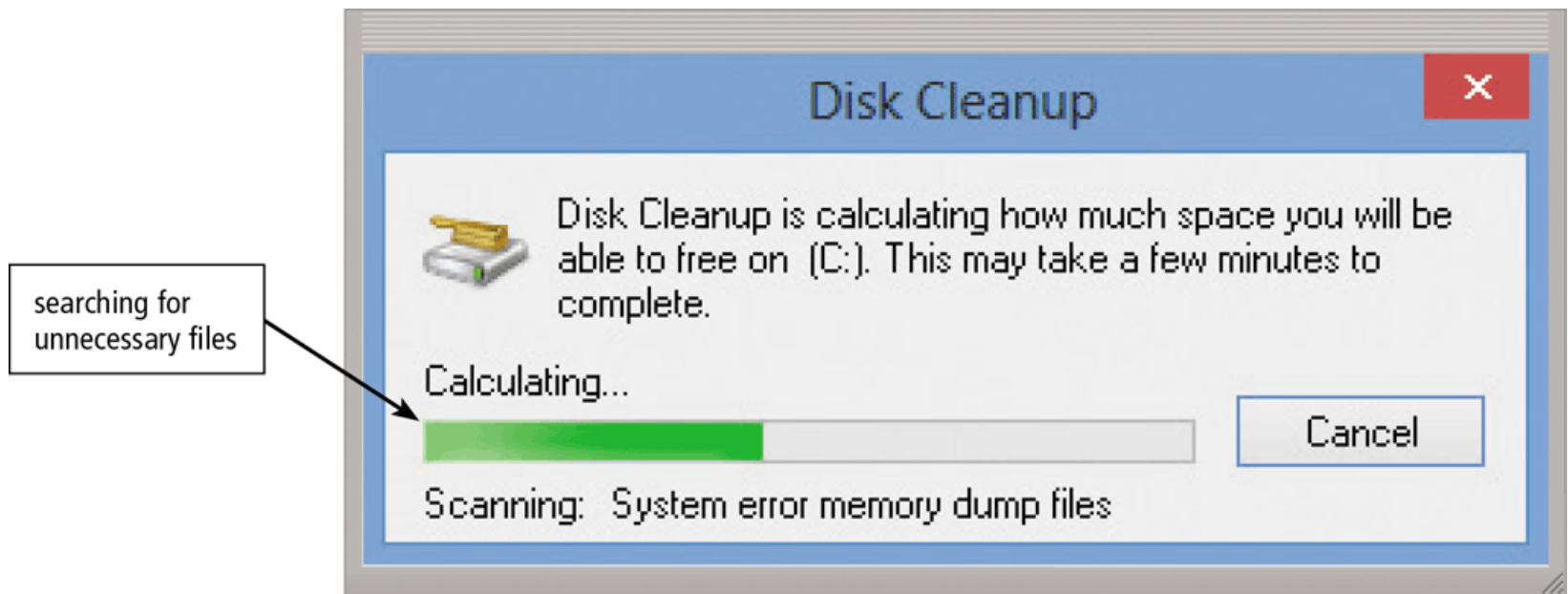
File, Disk, and System Management Tools

- An **image viewer** is a tool that allows users to display, copy, and print the contents of a graphics file, such as a photo
- An **uninstaller** is a tool that removes a program, as well as any associated entries in the system files



File, Disk, and System Management Tools

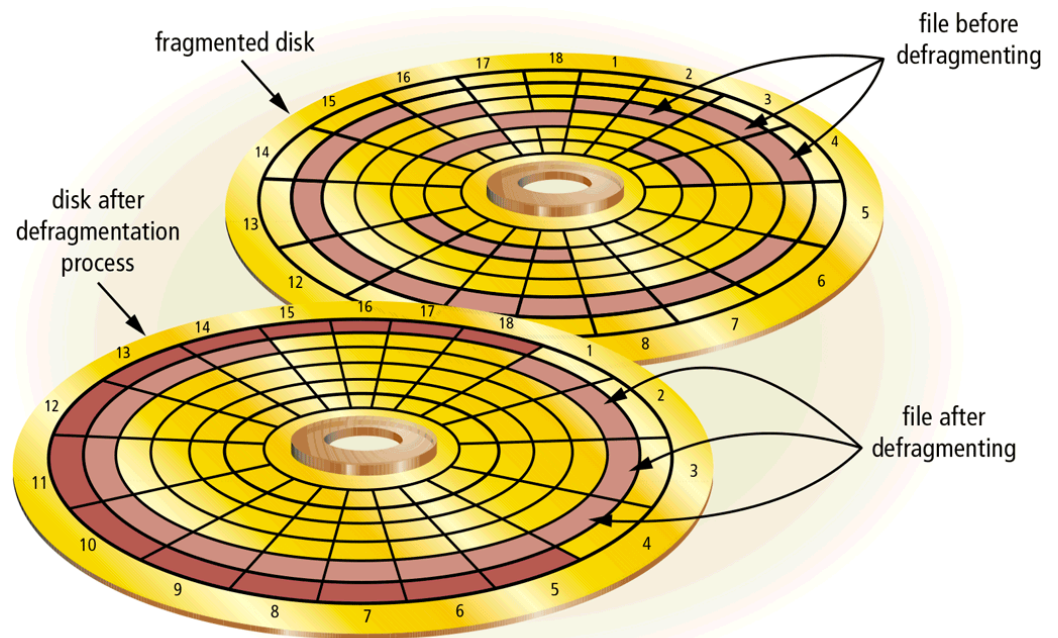
- A **disk cleanup** tool searches for and removes unnecessary files



File, Disk, and System Management Tools

- A **disk defragmenter** is a tool that reorganizes the files and unused space on a computer's hard disk so that the operating system accesses data more quickly and programs run faster

- Defragmenting



File, Disk, and System Management Tools

A **screen saver** is a tool that causes a display device's screen to show a moving image or blank screen if no keyboard or mouse activity occurs for a specified time

A **file compression tool** shrinks the size of a file(s)

A **PC maintenance tool** is a program that identifies and fixes operating system problems, detects and repairs drive problems, and includes the capability of improving a computer's performance

File, Disk, and System Management Tools

- A **backup tool** allows users to copy, or back up, selected files or the contents of an entire storage medium to another storage location
- A **restore tool** reverses the process and returns backed up files to their original form

