Technology in Action

Alan Evans • Kendall Martin

Mary Anne Poatsy

Ninth Edition

Technology in Action

Chapter 4
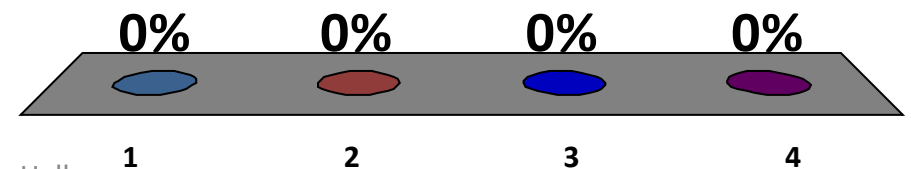
Application Software:
Programs That Let You Work and Play

Chapter Topics

- Nuts and bolts of software
- Web-based applications
- Productivity software for home and office
- Business software for home and office
- Media software for home
- Software for home
- Buying software
- Installing, uninstalling, and starting software
- Getting help with software

Which type of software is used to complete tasks at home, work, or school?

1. Educational Software
2. Utility Software
3. System Software
4. Application Software

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Applications hosted online by a vendor and made available to users over the internet are known as:

1. System Software
2. Web-Based Applications
3. Internet Applications
4. Online Resources

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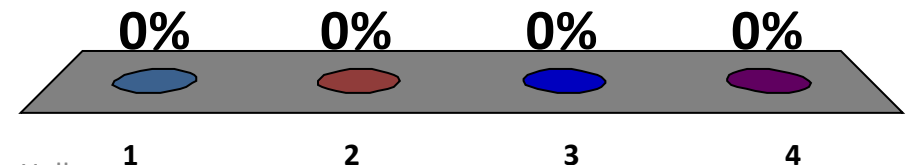
Software programs that are bundled together as a package are known as a:

1. Software Package
2. Software Suite
3. Technology Bundle
4. Application Bundle

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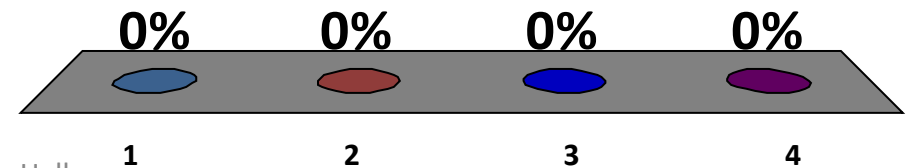
Which term refers to software that can recognize and open files created with older versions of the same program?

1. Memory Applications
2. Compatibility Software
3. Backward Compatible
4. Reminiscent Software

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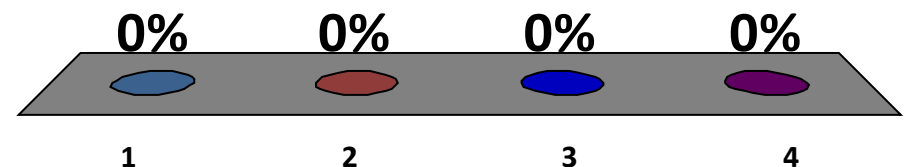
The Nuts and Bolts of Software

- Software refers to a set of instructions that tells the computer what to do
- Provides a means for us to interact with and use the computer
- Two basic types of software:
    - System software
    - Application software

System Software

- Helps run the computer
- Coordinates instructions between application software and hardware
- System software includes:
  - Operating system
  - Utility programs

Application Software

- Programs used to do tasks
    - Writing letters
    - Sending e-mail
    - Paying taxes
    - Creating presentations
    - Editing photos
    - Taking an online course

Web Based Applications

- Software as a Service (SaaS)

- Application is hosted online

- Made available over the Internet

- Microsoft Office Web Apps have fewer tabs than installed version

Microsoft Web Apps have fewer options

I know the difference between Word Processing, Spreadsheet, Presentation, and Database software.

1. Yes
2. No

0%   **0%**

1   2

Productivity Software for Home and Office

Programs that enable you to perform tasks required at home, school, and business

- Word processing
- Spreadsheet
- Presentation
- Database
- Personal information manager

Word Processing Software

- Most widely used application
- Used to create and edit documents
  - Research papers
  - Letters
  - Résumés
- Extensive formatting options are available
  - Change fonts, font styles, and sizes
  - Adjust margins, add borders and more

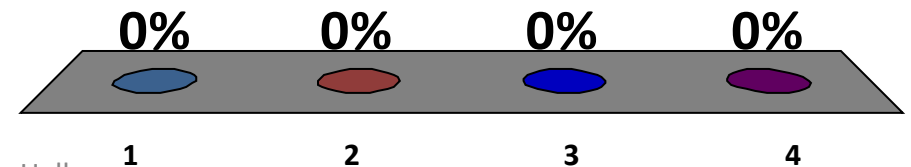# Word Processing Software (cont.)

- Microsoft Word is most popular
- Free options:
  - OpenOffice Writer
  - AbiWord
  - Include many of the same features as Word
  - Offer little support
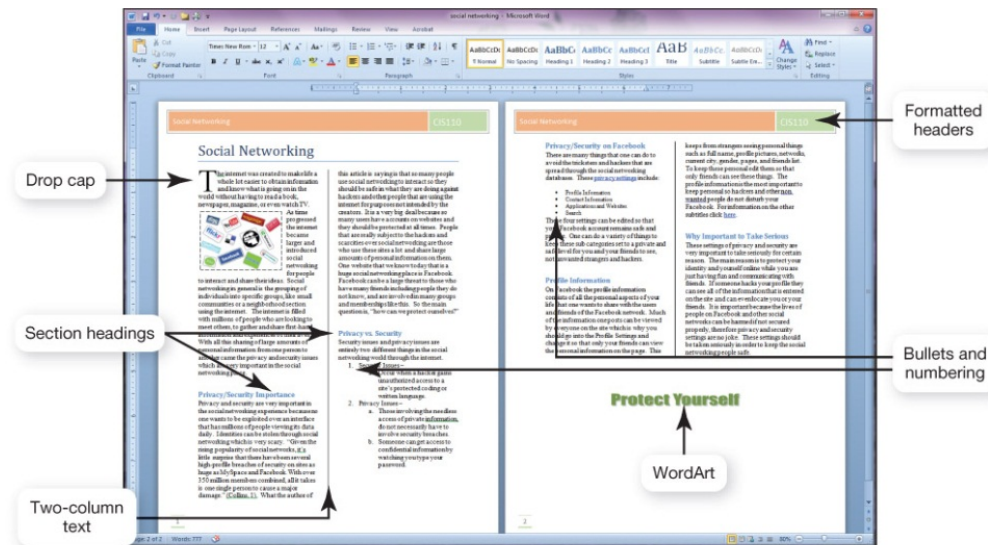
Formatted document

Which type of software enables you to easily do calculations and numerical analysis?

1. Spreadsheet
2. Word Processing
3. Database
4. System

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1   2   3   4

Spreadsheet Software

- Performs calculations and numerical analyses
- Features include:
  - Worksheets, columns, rows, cells
  - Text, values, formulas, and functions
  - Automatic recalculation
  - Variety of charts
- Examples
  - Microsoft Excel
  - OpenOffice Calc

Equations that you build yourself in spreadsheet software are known as:

1. Functions
2. Numerical Values
3. Formulas
4. Calculations

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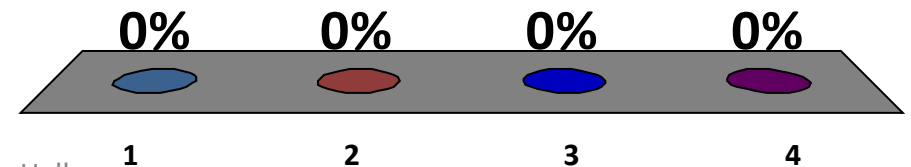
Presentation Software

- Used to create dynamic slide shows
- Features include:
  - Slide layouts
  - Design templates
  - Animation effects
  - Transitions
- Examples
  - Microsoft PowerPoint
  - OpenOffice Impress
  - Zoho Show
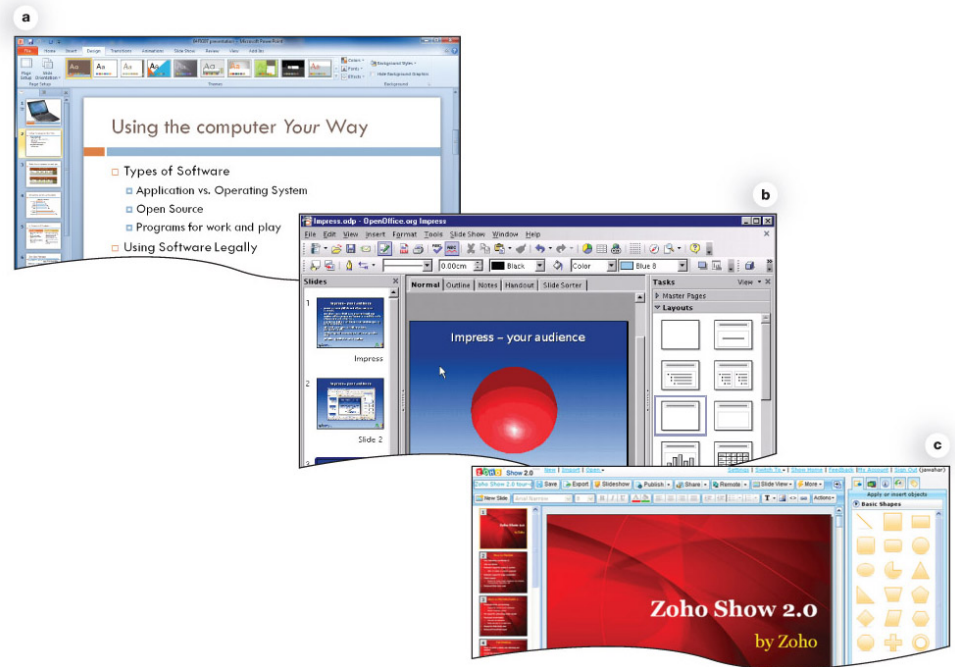
(a) Microsoft Office PowerPoint 2010
(b) OpenOffice.org Impress
(c) Zoho Show.

Database Software

- Used to store and organize data
- Features include:
  - Fields, records, and tables
  - Ability to group, sort, and filter data
  - Generate reports
- Examples
  - Microsoft Access
  - Oracle
  - MySQL

Table

SalesContacts								
ID	FirstName	LastName	Company	Street	City	State	ZipCode	Business
1	Susan	Scantosi	eWidget Plus	363 Rogue Street	St. Louis	MO	63136	(612) 444
2	Thomas	Mazeman	BooksRUs	2165 Piscotti Avenue	Springfield	IL	62702	(888) 234
3	Douglas	Seaver	Printing Solutions	7700 First Avenue	Topeka	KS	66603	(888) 968
4	Amir	Raviv	TechStands	1436 Riverfront Road	St. Louis	MO	63136	(877) 867
5	Franklin	Scott	WorksSuite	8789 Ploughman Ave	Tulsa	OK	74101	(800) 864
6	Ronald	Komeika	Creekside Financial	1264 Pond Hill Road	Toledo	OH	43601	(343) 332
7	Barbara	Mitchell	Market Tenders	9823 Bridge Street	La Porte	IN	46350	(888) 283
*	(New)							

Field

Record

Note Taking Software

- Microsoft OneNote
  - Organize and maintain lecture notes
  - Write directly on tablet
  - Convert handwritten notes to digital text
 - Integrated Web links
  - Audio or video can be added

Microsoft Outlook or Lotus Organizer are examples of:

1. Personal Information Mangers
2. Application Suites
3. Utility Programs
4. Financial Planning Software

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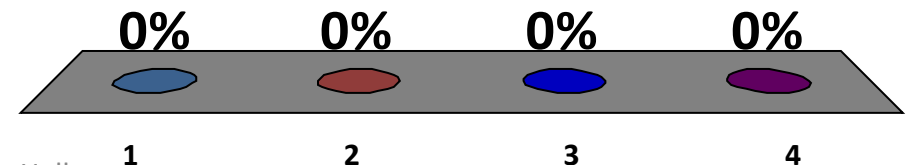
Personal Information Manager Software

- Used to replace the management tools found on a traditional desk

- Features include: Calendar, address book, notepad, to-do list, e-mail

- Examples
  - Microsoft Outlook
  - Lotus Organizer

- Web-based PIMs
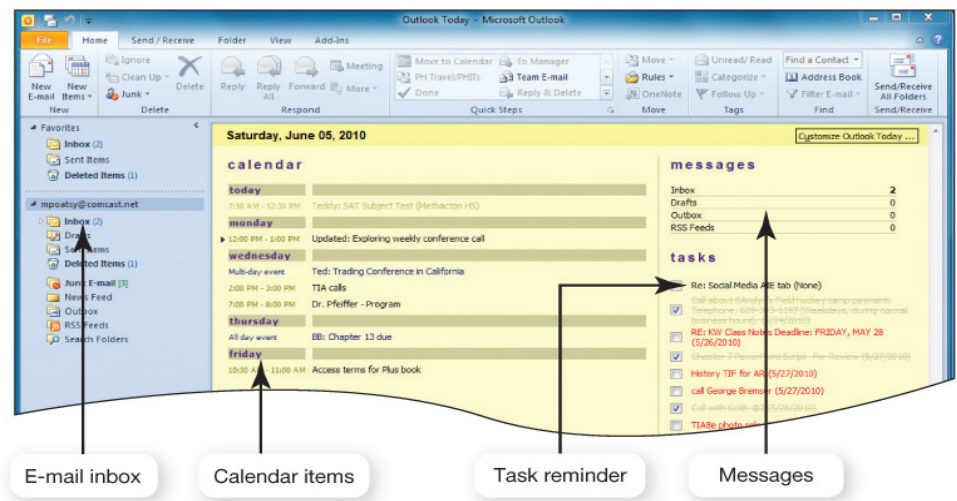
Productivity Software Features

- Tools to increase efficiency:
  - Wizards
    - Step-by-step guides to complete a task
  - Templates
    - Predesigned forms included with software
  - Macros
    - Small programs that group a series of commands to run as a single command

I know how to access the help feature in Microsoft Office products.

1. Yes
2. No

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1   **2**

Software Suites

- Group of software programs bundled as a package
- Cheaper than buying individual programs
- Compatibility between programs
- Share common features, toolbars, menus
- Microsoft Office is standard for proprietary software suites

Personal Financial Software

- Tax preparation
    - Intuit TurboTax
    - H&R Block At Home

- Financial planning
    - Intuit Quicken
    - Microsoft Money

- Web-based programs
    - Mint.com
    - Yodlee MoneyCenter.com

Home Business Software

- Programs helpful for a home business
  - Accounting software
  - Desktop publishing software
  - Web page creation tools

Accounting Software

- Helps small-business owners manage their finances
  - Tracking accounts receivable and payable
  - Inventory management, payroll, billing tools
  - Templates for invoices, statements, and financial reports
- Examples
  - Intuit QuickBooks
  - Peachtree by Sage

Desktop Publishing Software

- Create newsletters and other publications with complex layouts
  - Incorporate and arrange graphics and text
  - Change font, size, and style of text
  - Format text in columns, shapes, and patterns
  - Import files from other sources
  - Manipulate graphics: crop, flip, and rotate images
- Examples
  - Microsoft Publisher
  - QuarkXPress
  - Adobe InDesign

Web Page Authoring Software

- Design interesting, interactive Web pages
    - Wizards and templates
    - Reference materials
- Examples
    - Microsoft Expression Web
    - Adobe Dreamweaver
- Some Office applications will convert a file to Web-compatible format

Large Business Software

- Specialized programs exist for almost every aspect of business
  - Marketing and sales
  - Finance
  - Point of Sale
  - General productivity
  - Project management
  - Security
  - Networking
  - Data management
  - E-commerce
  - Human Resources

Other Business Programs

- Planning and management
  - Project management
  - Customer relationship Management (CRM)
  - Enterprise resource planning (ERP) system
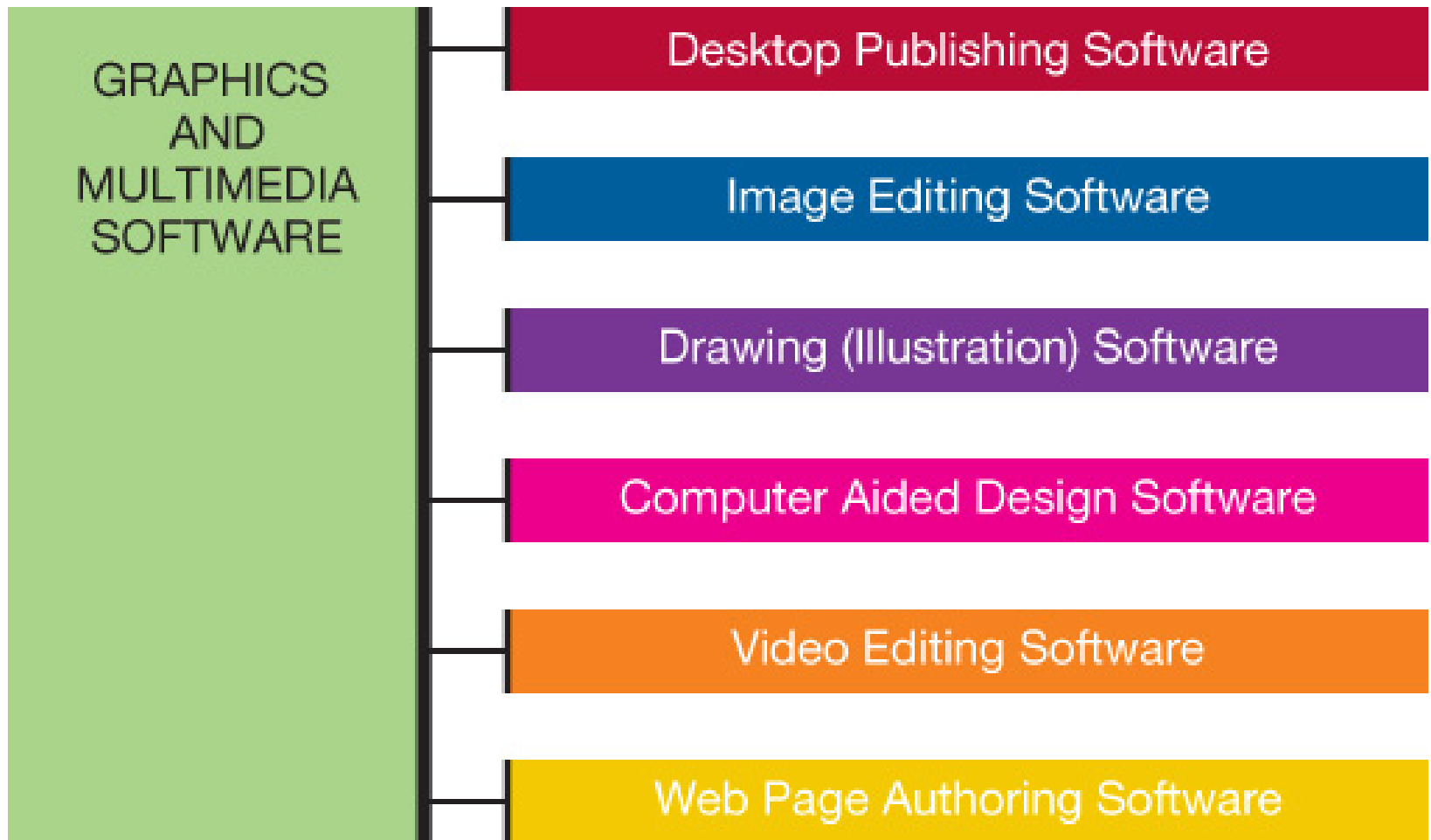 - Mapping programs
  - E-commerce software

Computer-Aided Design Software

- CAD programs create automated designs, technical drawings, and 3D models

- Build virtual models before construction

- Used in:
  - Architecture
  - Automotive industry
  - Aerospace
  - Medical engineering

Specialized Business Software

- Vertical market software is tailored to the needs of a particular company or industry
    - Estimating tools for bids on construction jobs
    - Property management for real estate
    - Scheduling and dispatching software
    - Library automation software
- Other programs can be custom developed to address company's specific needs

Media Software for Home

GRAPHICS AND MULTIMEDIA SOFTWARE

- Desktop Publishing Software
- Image Editing Software
- Drawing (Illustration) Software
- Computer Aided Design Software
- Video Editing Software
- Web Page Authoring Software

Digital Image Editing Software

- Used to edit photographs and other images
  - Remove red-eye
  - Modify contrast
  - Sharpness
  - Fix scratches
- Examples
  - Adobe Photoshop Elements
  - Roxio PhotoSuite
  - Microsoft Photo Story
  - Google Picasa

Create collages of your favorite images using Google's Picasa.

How Cloud Computing Works

- There are two sides to cloud computing:
    - Side we see as users
    - Various computers and servers that house the files and programs you access
    - Central server monitors demands on systems

Digital Audio Software

- Audio files include novels, newspapers, radio shows, and podcasts
- MP3 is a type of audio compression format
- Hundreds of applications allow you to copy, play, and organize MP3s
- Features include recording, ripping, burning, encoding and decoding, and format conversion
- Audio editing software perform basic tasks

Digital Video Editing Software

- Used to create and edit digital videos
- Intuitive drag-and drop features
  - Windows Live Movie Maker
  - Apple iMovie
- Wide range of special effects and tools
  - Adobe Premiere Pro
  - Apple's Final Cut Pro
- MP4 format files can be watched on portable media players

Media Management Software

- Organize audio and video files
  - Sort, filter, search by artist, album, category
  - Manage tracks and generate playlists
  - Burn songs to CDs and print liner notes
- Examples
  - Windows Media Player
  - Winamp
  - Apple iTunes

Software for Home

- Computer games make up majority of entertainment software in many categories
  - Action
  - Driving
  - Puzzles
  - Role-playing
  - Card-playing
  - Sports
  - Strategy
  - Simulations

Gaming Software

- Computer games require appropriate:
  - Processing power
  - Memory (RAM)
  - Hard disk capacity
  - Sound and video cards
  - Speakers
  - Monitor
  - DVD drive
  - Specialized controllers

Educational Software

- Types include:
  - K–12 education
  - Teaching new skills
  - Test preparation
  - Brain training
  - Tutorials
  - Simulations
  - Online courses
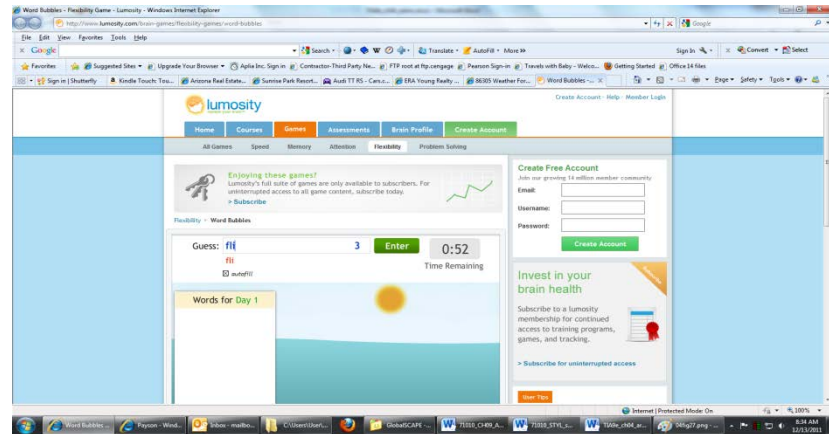
Drawing Software

- Used to create and edit
  - Two-dimensional, line-based drawings
  - Technical diagrams
  - Animations
- Creative drawings
  - Adobe Illustrator
- Technical drawings
  - Microsoft Visio
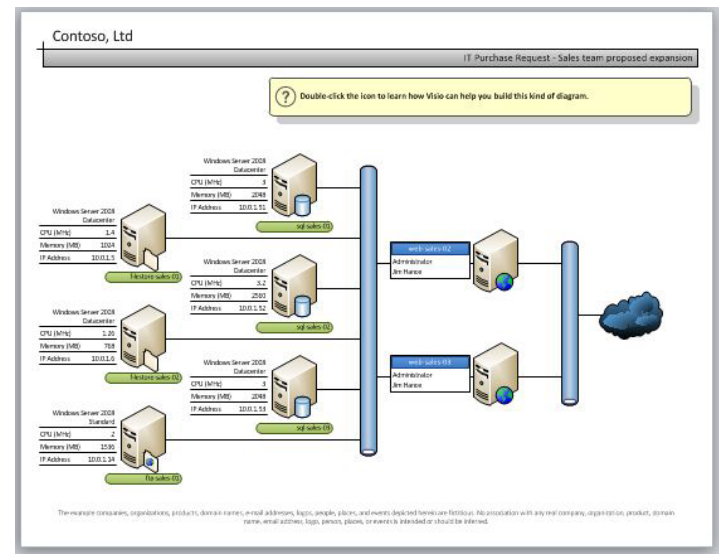
Visio

Buying Software

- Software can be purchased
  - From retail stores
  - Online
    - Request CD or DVD, if available
    - Create backup
  - Through catalogs
  - At auction
  - Custom-developed software

A ____ is an agreement between the user and the software company outlining the acceptable usage of the program.

1. Title
2. Permit
3. Handshake
4. License

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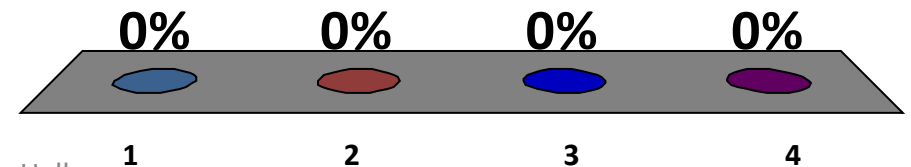
Software Licenses

- Agreement between user and company
- You buy a license, not the software itself
  - Ultimate owner of software
  - If copies can be made
  - Number of installations allowed
  - Warranties
- Multiuser licenses might be available
  - Use on more than one computer in household
  - Businesses and educational institutions

Pre-Installed Software

- New computers come with an operating system and some application software
  - Some sort of productivity software
  - Multimedia computers may offer graphics software
  - Some manufacturers include applications they hope you will try
  - Trial versions expire after short-term and must then be purchased for continued use

Discounted Software

- Students and educators
  - Campus and college bookstores
  - Online software suppliers
- Used software
  - Online auction sites such as eBay
- Computer shows
- Assure you purchase licensed programs

Freeware and Shareware

- Freeware: Copyrighted software you can use for free

- Beta versions: Programs still under development

- Shareware: Software that allows users to run it for a limited time for free

Software Versions

- Numbers indicate major and minor upgrades
  - Major upgrade: Version 2.0
  - Minor upgrade: Version 2.1
- Years (Microsoft Office 2010) and letters (WordPerfect Office X5) are also used
- Consider if upgrade adds important features before purchasing
- New versions are backward compatible

System Requirements

- Every program has a set of system requirements of minimum standards
  - Operating system
  - Primary memory (RAM)
  - Hard drive capacity
- Sometimes there are specifications for video card, monitor, CD drive and peripherals
- Ensure that your system setup meets minimum requirements

Installing, Uninstalling and Starting Software

- Most software must be permanently installed on your system
  - Installing from CD or DVD
  - Downloading from the Internet
- Uninstalling software
  - Use uninstall utility
- Starting software
  - Click icon in All Programs list
  - Use shortcuts
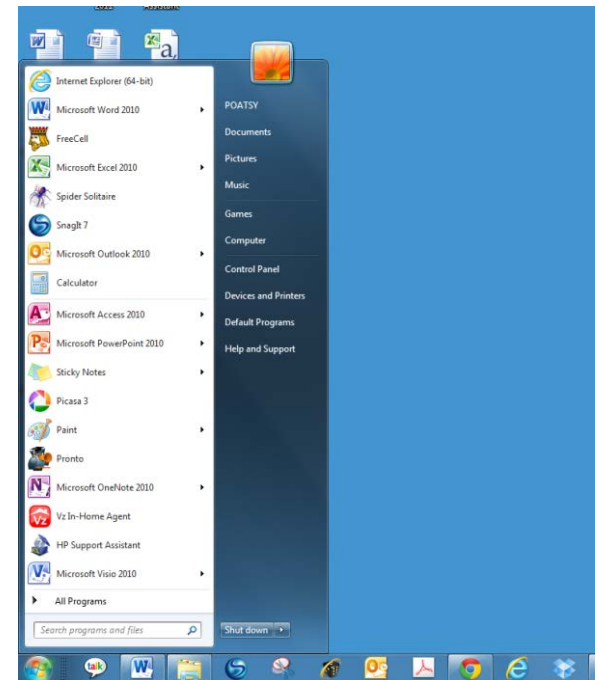
Start menu

Getting Help with Software

- Frequently asked questions (FAQS)
- Online help & support
- Screen tips
- Integrated help
- Help menu on File tab of most Microsoft applications
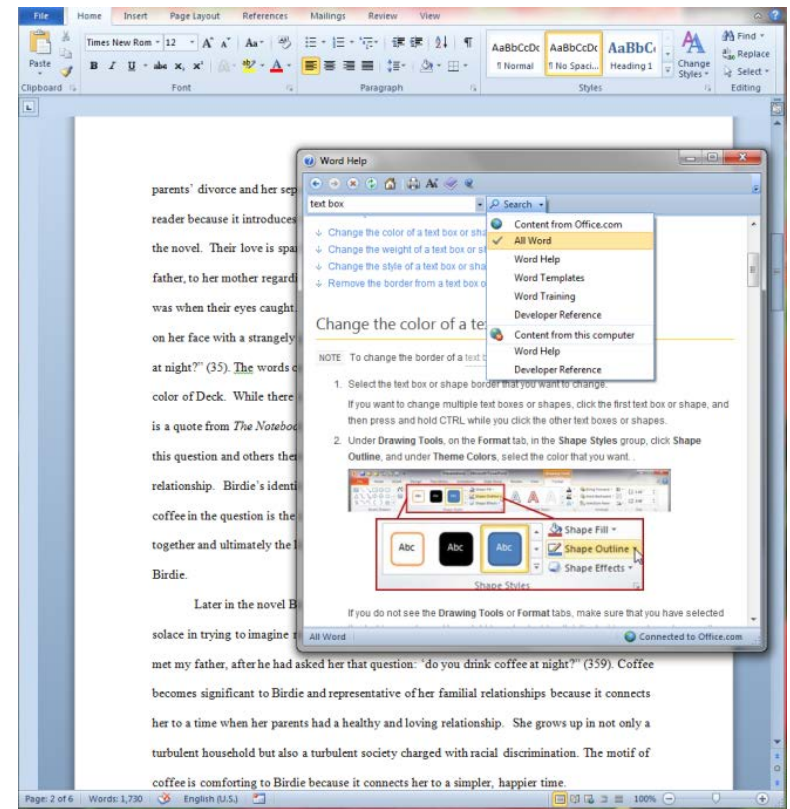
Microsoft Office gives you tips on tasks you're working on.

Software which coordinates instructions between application software and the computer's hardware is known as:

1. Mediating Software
2. Source Software
3. System Software
4. User Interface

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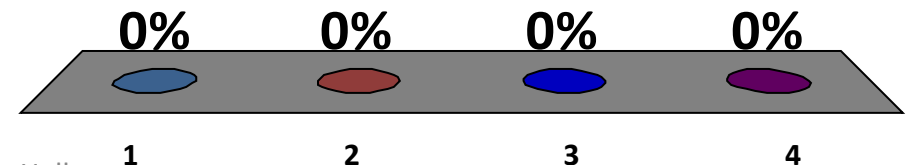
Which type of software provides program code that is publically available and has few restrictions?

1. Application Software

2. Proprietary Software

3. Open Source Software

4. Web-Based Software

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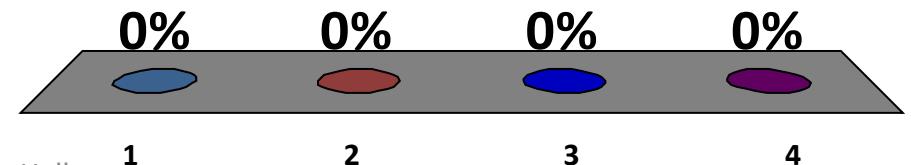
_____ stores sales and client contact information in one central database.

1. Enterprise Resource Planning System

2. Desktop Database

3. Word Processing Software

4. Customer Relationship Management Software

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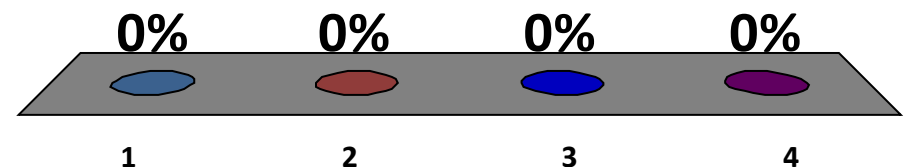
Pre-installed software can be referred to as:

1. Packageware
2. Selectware
3. Bloatware
4. Offerware

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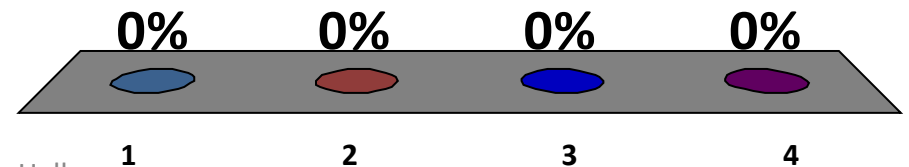
Chapter 4 Summary Questions

1. What's the difference between application software and system software?

Chapter 4 Summary Questions

2. What are Web-based applications, and how do they differ from traditional modes of software distribution?

Chapter 4 Summary Questions

3. What kinds of applications are included in productivity software?

Chapter 4 Summary Questions

4. What kinds of software do small and large businesses use?

Chapter 4 Summary Questions

5. What are the different types of media and entertainment software?

Chapter 4 Summary Questions

6. What are the different types of drawing software?

Chapter 4 Summary Questions

7. How can I purchase software or get it for free?

Chapter 4 Summary Questions

8. How do I install, uninstall, and start software?

Chapter 4 Summary Questions

9. Where can I go for help when I have a problem with my software?