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1.  There are two major kinds of software. The first one is system software, which works with application software, computer hardware, and end users. The second type is application software, which helps perform a wide range of tasks for the end-user.

2. System software programs manage and control computer hardware and provide a foundation for application software. Two types of system software are:

1) OS (Operating Systems). These manage computer software and hardware resources. Additionally, provide a UI (User Interface) and enable applications to run. Windows, MacOS, Linux can be included as examples.

2) Utility Programs. These programs are specialized to make computing easier. For example, search programs, backup programs, antivirus programs and virtual assistants.

3. Application software can be divided into three categories. One of the most popular categories, mobile apps, which consist of applications designed for tablets and cell phones. Another category, specialized applications, includes a wide range of programs that are more narrowly focused on specific disciplines and occupations. Finally, general-purpose applications, designed to perform common tasks that suit a broad range of users. Examples include word processors (Microsoft Word), spreadsheets (Excel), and web browsers (Chrome).

Mobile apps are designed for smartphones and tablets, focusing on portability and simple tasks, like messaging on WhatsApp. Specialized applications are tailored for specific industries or professions, such as designing in Photoshop or Video Editing. General-purpose applications, like Microsoft Word or Excel, are tools created to perform everyday tasks suitable for a wide range of users.

4.

1) Graphics programs.

2) Video game design programs.

3) Software suites.

5.

1) Personality of computer or User Interface (UI): provides a way for users to interact with the application, often including menus, toolbars, buttons, and a layout optimized for ease of use.

2)File Management: Includes options to create, open, save, and manage files, enabling users to store and retrieve their work efficiently.

3)Customization: Allows users to adjust settings, preferences, or layouts to tailor the application to their specific needs.

4) Help and Support: Offers built-in guidance, such as tooltips, FAQs, tutorials, or access to online resources for troubleshooting and learning.

5)Data Input and Output: Supports input methods (keyboard, mouse, or touchscreen) and enables exporting or printing data in various formats.

6) Security Features: Includes measures like password protection, encryption, and regular updates to safeguard user data and privacy.

6.

1) Word processors can be used in creating text-based documents. If I want to create letters, reports, or memos I use these processors. The most widely used word processor is Microsoft Word.

2) Spreadsheets help to organize, analyze, and graph numeric data. If I want to keep track of my budget I can refer to it. Microsoft Excel is the most popular spreadsheet program.

3) Database management system (DBMS) is a program that structures a collection of related data. It provides tools to create, read, update, and delete (CRUD) data from a database. If I am a businessperson and want to keep investment records in a wide range of numbers, I can use databases. Microsoft Access and Apple FileMaker are two widely used database management systems.

4)  Presentation software is used to create visually appealing slideshows for delivering information effectively. It allows users to incorporate text, images, videos, and animations to enhance their presentations. If I need to present a project, a business proposal, or an academic topic, I can use presentation software. The most popular program for this purpose is Microsoft PowerPoint.

7. An example of a mobile application for:

Music: Spotify

Video: YouTube

Social Network: Instagram

Shopping: Amazon

Games: Clash of Clans

8. Example:

If I run a business and sell a product for $10. I sell 200 units every month, earning 2,000 overall. Using Microsoft Excel I can perform What-If analysis by asking:

* What if the price increases to $15? What will be the overall earnings?

By adjusting different prices, I can analyze different outcomes and decisions.

9.

 1) the product of 50 and 100: =C2\*C3

2) the average of 30, 50, 100: =AVERAGE(C1:C3)

3)  the highest number of 30, 50, 100: =MAX(C1:C3)

4) the difference of 100 and 30: =C3-C2

5) the lowest number of 30, 50, 100: =MIN(C1:C3)

10. The difference between relative referencing and absolute referencing in a spreadsheet lies in how the references to cells behave when copied or moved to other cells, for example:

Relative referencing: the cell reference changes based on the relative position of the formula when copied to a new location.

Example: If I have a formula =A1+B1 in C1 and copy the formula to C2, it automatically adjusts to =A2+B2.

Absolute Referencing: the cell reference remains fixed regardless of where the formula is copied or moved.

Example: if I have a formula =$A$1 + $B$1 in cell C1 and copy the formula to C2, it will remain =$A$1 + $B$1. The $ symbol locks the column and row.

11.

1) Video editors are used to edit, enhance quality and appearance of videos. Additionally, these editors help to add special effects, music tracks and titles. Three well-known video editors are Movavi Video Editor Plus for Android phones and tablets, Apple iMovie for apple devices, and Adobe Premier Elements 2021 for a professional tool on laptops and desktops.

2) Image editors, also known as photo editors, are specialized graphics programs for editing or modifying digital photographs. They are often used to touch up photographs to remove scratches and other imperfections. The photographs consist of thousands of dots, or pixels, that form images, often referred to as bitmap or raster images. One limitation of bitmap images, however, is that when they are expanded, the images can become pixelated, or jagged on the edges.

3) Illustrator programs, also known as drawing programs, are used to create or edit vector images. Vector images use geometric shapes or objects while bitmap images use pixels to represent images.

4) Desktop publishing programs are used to combine text and graphics to create professional-looking publications. Popular programs include Adobe InDesign, Microsoft Publisher, and QuarkXPress. Graphic artists often import text and images from other sources into these programs.

12.

1) Blogs are diaries or commercials created online by individuals.

2) Creating a site is called web authoring. Web authoring programs are also known as web page editors and HTML editors, these programs provide support for website design and HTML coding.

3) Some web authoring programs are WYSIWYG (what you see is what you get) editors, which means you can build a page without interacting directly with HTML code.

13.

1) A collection of separate application programs bundled together and made available as a group is called a software suite. Four types of suites are office suites, cloud suites, specialized suites, and utility suites.

2) Suites are designed to work together seamlessly, ensuring compatibility and smooth data transfer between different applications within the suite, increasing efficiency and productivity.

14. A traditional office suite is installed on a device, works offline, and saves files locally, with updates requiring manual installation. A cloud or online suite is accessed via the internet, supports real-time collaboration, and stores files in the cloud with automatic updates. Traditional suites are a one-time purchase, while online suites are usually subscription-based. Cloud suites excel in accessibility and collaboration, while traditional suites are better for offline use.