计算机文化复习重点

L1 Computers and digital basics

1、 **Technological convergence** is a process by which several technologies with distinct functionalities evolve to form a single product.

技术融合是指几种具有不同功能的技术进化成一个单一产品的过程。

2、 A **computer** is a multipurpose device that accepts input, processes data, stores data, and produces output, all according to a series of stored instructions.

计算机是一种接受输入、处理数据、存储数据和产生输出的多用途设备，这些都是根据一系列存储的指令进行的。

3、 A **computer program** is the series of instructions that tells a computer how to carry out processing tasks. These programs form the **software**.

计算机程序是告诉计算机如何执行处理任务的一系列指令。这些程序构成了软件。

4、 **Application software** is a set of computer programs that helps a person carry out a task.

应用软件是一组帮助人们完成任务的计算机程序。

5、 **System software** is a set of programs that help the computer system monitor itself in order to function efficiently.

系统软件是一组帮助计算机系统进行自我监控以实现高效运行的程序。

6、 **Computer categories**:

PC, Servers, Mainframes, Supercomputers.

计算机类别：个人电脑，服务器，大型机，超级计算机。

7、 **Data representation** refers to the form in which data is stored, processed, and transmitted.

数据表示是指存储、处理和传输数据的形式。

8、 **Digital data**: Text, numbers, graphics, sound and video that has been converted into discrete digits.

数字数据：文本、数字、图形、声音和视频被转换成离散数字。(一段段的数字，可以通过微分模拟出波形)

9、 **Analog data** is represented using an infinite scale of values.

模拟数据使用无限尺度的数值表示。(平滑的波形)

10、 **Binary number system**

11、 **High-level programming language**: C, Basic, COBOL, Java, Perl, Python.

12、 **Source code** is the human-readable version of a program created in a high-level language by a programmer.

源代码是程序员用高级语言创建的程序的人类可读的版本.

13、 An **instruction set** is a collection of preprogrammed activities a microprocessor is hard-wired to perform.

指令集是一组预先编程的活动，微处理器是硬连线来执行的. (就由处理器设计的架构决定了，是物理结构上确定了这些信息通过哪个路径去执行什么操作)

14、 **Machine language** is the list of codes for instruction set.

机器语言是指令集的代码列表。

15、 The **ALU** (Arithmetic Logic Unit) is the part of the microprocessor that performs arithmetic operations.

算术逻辑单元(ALU)是微处理器中执行算术运算的部分。

16、 The ALU uses **registers** to hold data that is being processed.

ALU 使用寄存器保存正在处理的数据。

L2 Hardware

17、 **Components of PC system**:

System unit, keyboard, mouse, hard disk drive, optical drive, other storage, sound system, display system, network and internet access, printer.

PC 系统组成部分：系统单元，键盘，鼠标，硬盘驱动器，光驱，其他存储，音响系统，显示系统，网络和互联网接入，打印机。

18、 A **desktop computer** fits on a desk and runs on power from an electrical wall outlet.
台式机可以安装在桌子上，并通过墙上的电源插座运行。

19、 A **portable computer** is a small, lightweight personal computer.
便携式计算机是一种体积小、重量轻的个人计算机。

20、 A **microprocessor** is an integrated circuit designed to process instructions.
微处理器是为处理指令而设计的集成电路。

21、 **Microprocessor clock** is a timing device that sets the pace for executing instructions – MHz, GHz.
微处理器时钟是一种定时装置，它设定执行指令的速度-兆赫，千兆赫.

22、 **Word size** is the number of bits that a microprocessor can manipulate at one time – 32 bits, 64 bits.
字大小是微处理器一次可以操作的位数-32 位，64 位。

23、 **Serial processing**: one instruction is processed at a time.
串行处理：一次只处理一条指令。

24、 **Pipelining processing**: an instruction can begin to be processed before the previous instruction's processing is complete.
流水线处理：在完成前一条指令的处理之前，可以开始处理指令。

25、 **Parallel processing**: multiple instructions can be processed at the same time.
并行处理：可以同时处理多个指令。

26、 **RAM** (Random Access Memory) is a temporary holding area for data, application program instructions, and the operating system.
RAM(随机存取存储器)是数据、应用程序指令和操作系统的临时存储区。

27、 **ROM** (Read-Only Memory) is a type of memory circuitry that holds the computer's startup routine.
ROM(只读存储器)是一种保存计算机启动程序的存储器电路.

28、 **SDRAM** (Synchronous Dynamic RAM). Most of today's PCs use SDRAM. It is fast and relatively inexpensive. Innovations such as dual-channel technology and double data rate have increased SDRAM speed.
同步动态 RAM 今天的大多数个人电脑都使用 SDRAM。它速度快而且相对便宜。双通道技术和双数据速率等创新提高了 SDRAM 的速度。后来发展为现在 DDR 系列的内存。

29、 **EEPROM** (Electrically Erasable Programmable Read-Only Memory 带电可擦可编程只读存储器，解决 ROM 只能写入不能擦除的问题)

30、 **Magnetic storage** stores data by magnetizing microscopic particles on the disk or tape surface – hard disk drive, floppy disk, tape.
磁存储通过在磁盘或磁带表面磁化微观颗粒来存储数据：**硬盘驱动器、软盘、磁带**。

31、 **Hard Disk Drive**: large capacity, fast access to files, economical; not the most durable technology.
硬盘驱动器：容量大，文件存取快，经济，不是最耐用的技术。

32、 **Optical storage** stores data as microscopic light and dark spots on the disk surface – CD, DVD, and Blu-ray, durable; slow.
光学存储数据作为微观光点和黑点在磁盘表面：**CD，DVD，和蓝光（BD）**，耐久，缓慢。

33、 **Solid state storage/ Flash memory**, stores data in an erasable, rewritable circuitry – SD card, SSD, USB, expensive.
固态存储/闪存，将数据存储在可擦除、可重写的电路中：**SD 卡，SSD，USB**，昂贵。

34、 **Peripheral devices**: **Basic Input Devices**: Keyboard, mouse, touchpad, game controller, touch screen.
外围设备：基本输入设备：键盘、鼠标、触摸屏、游戏控制器、触摸屏。

35、 **Display Devices**: LCD (Liquid Crystal Display) manipulates light within a layer of liquid crystal cells.

36、 **OLED** (Organic light emitting diode 有机发光二极管) screens use organic light emitting diodes and use less power.

显示设备：液晶显示器(LCD)操纵一层液晶单元内的光。

有机发光二极管(OLED)屏幕使用有机发光二极管，使用较少的功率。

37、 **Factors that affect image quality**:

Screen size, dot pitch (DP), viewing angle width,

Response rate, color depth and resolution.

影响图像质量的因素：屏幕大小，点间距(DP)，视角宽度，响应率，颜色深度和分辨率。

38、 **Data bus** moves data between RAM and the microprocessor (CPU).

数据总线在 RAM 和微处理器之间移动数据。

L3 Software

39、 **Computer program** is the series of instructions that tells a computer how to carry out processing tasks.

计算机程序是告诉计算机如何执行处理任务的一系列指令。

40、 **Software is categories**:

System software - Designed for computer-centric tasks.

Application software - Designed to help people accomplish real-world tasks.

软件分为以下几类：

系统软件-为以计算机为中心的任务而设计的；为帮助人们完成现实世界的任务而设计的应用软件。

41、 **Utility software** is designed to help people monitor and configure settings for computer system equipment, the operating system, or application software.

实用软件旨在帮助人们监视和配置计算机系统设备、操作系统或应用软件的设置（比如防火墙、磁盘分区、病毒查杀等这些软件）。

42、 **Desktop widget** is a specialized utility program that appears on a computer's screen-based desktop.

桌面小部件是出现在计算机屏幕桌面上的专用实用程序.

43、 **Device driver** is software that helps a peripheral device establish communication with a computer.

设备驱动程序是帮助外围设备与计算机建立通信的软件。

44、 **Document Production Software**: word processing, desktop publishing (DTP), web authoring.

文档制作软件：文字处理，桌面出版(DTP)，网页创作。

45、 **Spreadsheet Software**: particularly useful for what-if analysis.

电子表格软件：对于什么-如果分析特别有用。

46、 **Database Software** helps you enter, find, organize, update, and report information stored in a database.

数据库软件帮助您输入、查找、组织、更新和报告存储在数据库中的信息。

47、 **Business Software**:

Vertical market software is designed to automate specialized tasks in a specific market or business. For example, patient management system in hospitals.

Horizontal market software – Payroll software, accounting software, project management software.

商业软件：垂直市场软件-设计是为了使特定市场或业务中的特定任务自动化（多项功能的整合）。

水平市场软件-工资软件、会计软件、项目管理软件（基于单一功能）。

48、 A **copyright** is a form of legal protection that grants the author of an original work an exclusive right to copy, distribute, sell and modify that work.

版权是一种法律保护形式，赋予原著作者复制、发行、出售和修改作品的专属权利。

49、 **Software license** is a legal contract that defines the ways in which you may use a computer program.

软件许可是一种法律契约，它定义了您可以使用计算机程序的方式。

50、 **Public domain**: not protected by copyright.

公有领域：不受版权保护。

51、 **Proprietary**: may be freely copied, distributed, and even resold, not allowed to apply for a copyright on it.

专有：可以自由复制、分发甚至转售，不得申请版权

52、 **The differences between open source software and freeware**:

Freeware is available for free, and is allowed to be used, copied for free, but not allowed to be altered or resold. Open source software makes the source code available for people to modify it. Open source software may be sold or distributed free of charge, but in case it must be distributed with the source code.

开放源码软件和免费软件之间的区别：

免费软件是免费的，并允许使用，复制免费，但不允许修改或转售。

开源软件使**源代码可供人们修改**。如果它必须与源代码一起分发的话，开放源码软件可以免费出售或分发。

L4 OS and file management

53、 An **Operating System** (OS) is a type of system software that acts as the master controller for all activities that take place within a computer system.

操作系统(OS)是一种系统软件，它充当计算机系统内所有活动的主控制器。

54、 **Resources for OS**: Processor resources, memory, storage, input and output, user interface.

操作系统的资源：处理器资源，内存，存储，输入和输出，用户界面。

55、 **Multitasking** allows two or more tasks, jobs, or programs to run simultaneously.

多任务处理允许两个或多个任务、作业或程序同时运行。（重点在处理器对任务）

56、 Within a single program, **multithreading** allows multiple parts, or threads, to run simultaneously.

在单个程序中，多线程允许多个部分或线程同时运行。（重点在任务可以用处理器的多个处理线程）

57、 **Multiprocessing** capability supports a division of labor among all the processing units.

多处理能力支持所有处理单位之间的分工。

58、 **Memory leak**: instructions and data from one area of memory overflows into memory area of another program.

内存泄漏：来自一个内存区域的指令和数据溢出到另一个程序的内存区域。（在应用程序中的内存没有及时释放，导致内存既没有被应用利用也无法被其他应用调用，导致系统运行速度下降）

59、 **User Interface** is the combination of hardware and software that helps people and computers communicate with each other -- Graphical User Interface (GUI)

用户界面是帮助人和计算机相互通信的硬件和软件的结合-图形用户界面(GUI)

60、 **Boot process** is the sequence of events that occurs between the time that you turn on a computer and the time that it is ready for you to issue commands.

引导过程是指从打开计算机到准备发出命令之间发生的事件序列。

61、 **ROM** (Boot program tells **hard disk** to load the OS) --Operating system kernel is loaded into **RAM** -- **Processor** (OS available as needed)

ROM(引导程序告诉硬盘加载操作系统)——操作系统内核加载到 RAM——处理器(根据需要提供操作系统)。

62、 **Why doesn't a computer simply leave the operating system in memory?**

Most of a computer's memory is volatile DRAM, which cannot hold any data when the power is off. ROM and EEPROM are non-volatile memory circuitry, but they are not large enough to store an entire OS.

为什么一台计算机不简单地把操作系统留在内存中呢？

计算机的大部分内存是不稳定的 DRAM，当电源关闭时，DRAM 无法保存任何数据。ROM 和 EEPROM 是非易失性存储器电路，但它们不足以存储整个操作系统（ROM 不是硬盘！ROM 不是硬盘！ROM 不是硬盘！ROM 在计算机一般指的是 BIOS ROM，只有非常小的一个空间装载着引导程序）

63、 **Microsoft Windows Strengths**: the mostly widely used OS, the number of variety programs running on Windows, variety hardware platform, excellent support as built-in drivers and plug-and-play functionality.

Microsoft Windows 的优势：广泛使用的操作系统、运行在 Windows 上的各种程序的数量、各种硬件平台、作为内置驱动程序和即插即用功能的优秀支持。

64、 **Microsoft Windows Weaknesses**: Reliability, Security.

微软 Windows 的弱点：可靠性，安全性

65、 **Mac OS Strengths**: Based on Unix, Reliability, Security.

MacOS 的优势：基于 Unix，可靠性，安全性。

66、 **Mac OS Weaknesses**: Limited selection of Software.

Mac 操作系统的弱点：软件选择有限

67、 **Linux** is distributed along with its source code under the terms of a GPL (General Public License), which allows everyone to make copied for their own use, to give to others, to sell. It is also secure and reliable.

Linux 是按照 GPL(通用公共许可证)的条款与其源代码一起分发的，它允许每个人自己制作副本，供自己使用，给予他人，销售。它也是安全可靠的。

68、 **Linux Weakness**: requires more tinkering, limited numbers of programs.

Linux 的弱点：需要更多的修补，数量有限的程序。

69、 **Multiuser Operating system** allows a single, centralized computer to deal with simultaneous input, output and processing requests from many users.

多用户操作系统允许一台单一的集中式计算机同时处理来自许多用户的输入、输出和处理请求。

70、 **File format** is the organization and layout of data that is stored in a file.

文件格式是存储在文件中的数据的组织和布局。

71、 A **disk partition** is a section of hard disk drive that is treated as a separate storage unit.

磁盘分区是作为单独存储单元处理的硬盘驱动器的一部分。

72、 **The differences between file extension and file format**: A file extension is part of the file name. The extension is the last part of the file name after the dot. The file extension is usually related to the file format, but it is not the native file format. A file format is the organization and layout of data that is stored in a file.

文件扩展名和文件格式的区别：文件扩展名是文件名的一部分。扩展名是在点之后的文件名的最后一部分。文件扩展名通常是相关的。文件格式，但它不是本机文件格式。文件格式是存储在文件中的数据的组织和布局。

73、 **Deleting a file** changes the status of that file's clusters to "empty" and removes the file name from the index file. The file's data remains in the clusters until a new file is stored there.

删除文件会将该文件的群集状态更改为“空”，并从索引文件中删除文件名。该文件的数据将保留在集群中，直到一个新文件被存储在其中。

74、 **Fragmented files** are stored in noncontiguous clusters, which can decrease performance.

碎片文件存储在不连续的集群中，这会降低性能。

L5 Local area Network

75、 **WAN (Wide Area Network)** consists of several smaller networks, covers over a whole country or continent.

广域网(Wide Area Network)由几个较小的网络组成，覆盖整个国家或大陆。

76、 **Client/server mode** is a hierarchical network structure in which server is at the top of the hierarchical and client computers can access the resources on server.

Client/Server 模式是一种分层网络结构，其中服务器位于层次结构的顶端，客户端计算机可以访问服务器上的资源。

77、 **Peer-to-peer mode**: all devices are equal, there is no server.

对等模式：所有设备都是平等的，没有服务器.

78、 Two similar networks can be connected by **bridge** or **switch**.

Two different networks can be connected by **router** or **gateway**.

两个类似的网络可以通过网桥或交换机连接。

两个不同的网络可以通过路由器或网关连接。

79、 **Gateway** is a generic term for any device or software code used to join two networks.

网关是连接两个网络的任何设备或软件代码的通用术语。

80、 **Bandwidth** is the transmission capacity of a communications channel.

Bandwidth of a channel carrying **digital data**: bps

Bandwidth of a channel carrying **analog data**: Hz

带宽是通信信道的传输容量。

传输数字数据的信道的带宽：bps

传输模拟数据的信道的带宽：Hz

81、 **Broadband**: high-bandwidth communication systems, e.g. cable TV, DSL.
宽带：高带宽通信系统，如有线电视、DSL.

82、 **Narrowband**: communications systems with less capacity, e.g. dial-up Internet.
窄带：容量较小的通信系统，例如拨号互联网.

83、 **Communication protocols**: a set of rules for efficiently transmitting data form one network node to another
通信协议：一组有效地将数据从一个网络节点传送到另一个网络节点的规则。

84、 **Packet** is the basic transmission unit. A packet is a parcel of data that is sent across a computer network.
包是基本的传输单元。数据包是通过计算机网络发送的数据包。

85、 **Circuit-switching technology**: establish a dedicated, private link between source and destination. Can guarantee the quality, but inefficient. -- E.g. phone call.
电路交换技术：在源和目的地之间建立一个专用的专用链路.可以保证质量，但效率低下。-例如打电话。

86、 **Packet switching technology**: divides message into packets and send them to the destination independently – E.g. today's Internet, LAN. – First-come, First serve – More efficient.
分组交换技术：将消息分成分组，并将它们独立地发送到目的地。

87、 A **MAC address** is a unique number assigned to a network interface card when it is manufactured.
MAC 地址是制造时分配给网络接口卡的唯一号码。

88、 An **IP address** is a series of numbers used to identify a network device.
IP 地址是用于标识网络设备的一系列数字。

89、 **Ethernet** is the most popular LAN technology today. -- standardized in 1983 as IEEE 802.3
以太网是当今最流行的局域网技术。

90、 **CSMA/CD** (Carrier Sense Multiple Access with Collision Detection,) , a protocol to handle collision and coordinate multiple stations to communicate.
CSMA/CD（带有冲突检测的载波侦听多址访问），一种处理冲突和协调多个站进行通信的协议。

91、 **Ethernet Equipment**: Ethernet adapter (Ethernet card, or NIC), Network hub, Network switch, Network router, RJ45 connector, twisted pair cables.
以太网设备：以太网适配器(以太网卡，或网卡)，网络集线器，网络交换机，网络路由器，RJ 45 连接器，双绞线。

92、 **Wireless network Advantage**: Mobility
无线网络优势：移动性

93、 **Wireless network Disadvantages**: Slower, Range, Licensing, Security.
无线网络的缺点：慢，范围，许可，安全。

94、 **Bluetooth** is a short-range, wireless network technology designed to make its own connections between electronic devices, without wires, cables, or any direct action from a user.
蓝牙是一种短距离无线网络技术，其目的是在电子设备之间建立自己的连接，而不需电线、电缆或用户的任何直接操作。

95、 **LAN advantages:** Sharing resources.
局域网的优势：共享资源。

96、 **LAN disadvantages:** resources become unavailable when network malfunctions; Security issues, more vulnerable.
局域网的缺点：当网络故障时，资源变得不可用；安全问题，更易受到攻击。

L6 Internet

97、 The Internet **backbone** is a network of high-capacity communications links that provides the main routes for data traffic across the Internet.
因特网骨干网是一个由高容量通信链路组成的网络，它为互联网上的数据通信提供了主要的路由。

98、 **NSP**: network service provider. **NAP**: network access point
ISP: Internet service provider. To communicate with an ISP, computer uses some type of communications device, such as a modem.

NSP：网络服务提供商。NAP：网络接入点

ISP：互联网服务提供商。为了与 ISP 通信，计算机使用某种类型的通信设备，如调制解调器。

99、 **Internet Protocols**: TCP/IP: primary protocols for Internet

TCP (Transmission Control Protocol), Creates connection and exchange packets of data.

IP (Internet Protocol), Provides devices with unique addresses.

HTTP (Hypertext Transfer Protocol), Exchanges information over the Web

POP (Post Office Protocol), Transfers mail from an e-mail server to a client inbox

4 SMTP (Simple Mail Transfer Protocol), Transfers e-mail messages from client computers to an e-mail server.

Internet 协议：TCP/IP：因特网的主要协议

TCP(传输控制协议)，创建连接和交换数据包的数据。

IP(Internet Protocol)，为设备提供唯一的地址。

http(超文本传输协议)，通过 Web 交换信息

POP(邮局协议)，将邮件从电子邮件服务器传输到客户端收件箱。

SMTP(简单邮件传输协议)，将电子邮件从客户端计算机传输到电子邮件服务器.

100、 **Domain name** is an easy-to-remember name, each corresponding to a unique IP address.

域名是一个容易记住的名字，每个域名对应一个唯一的 IP 地址.

101、 **DNS**: **domain name server,** a database that relates domain names to IP addresses

DNS：域名服务器，一个将域名与 IP 地址相关联的数据库。

102、 **Latency (or round trip time, RTT)** is the elapsed time for data to make a round trip from point A to point B and back to point A.

延迟(或往返时间，RTT)是数据从点 A 到点 B 并返回到 A 点的往返时间。

103、 When upstream speeds differ from downstream speeds, you have an **asymmetric** Internet connection

当上游速度与下游速度不同时，您有一个不对称的 Internet 连接

104、 When upstream and downstream speeds are the same, you have a **symmetric** Internet connection.

当上游和下游速度相同时，您就有一个对称的 Internet 连接。

105、 **Dial-up connection** is a fixed Internet connection that uses a voiceband modem and telephone lines to transport data between computer and ISP.

拨号连接是一种固定的互联网连接，它使用音频调制解调器和电话线在计算机和 ISP 之间传输数据。

106、 **Voiceband modem** converts the signals from computer into signals that can travel over telephone lines.

音频调制解调器将来自计算机的信号转换为可以通过电话线传输的信号。

107、 **Dedicated Lines**: T1, T3, and T4 lines are leased from the telephone company and offer fast, high-capacity data transmission.

专用线路：t1、t3 和 t4 线路从电话公司租用，提供快速、高容量的数据传输。

108、 **ISDN (Integrated Services Digital Network，综合服务数字网络)** is a type of fixed Internet connection that moves data at speeds of 64 Kbps or 128 Kbps over ordinary telephone lines.

ISDN(综合服务数字网络)是一种固定的因特网连接，它以 64 Kbps 或 128 Kbps 的速度在普通电话线上移动数据。

109、 **DSL (Digital Subscriber Line，数字用户线)** is a high-speed, digital, always-on Internet access technology that runs over standard phone lines.

DSL(数字用户线)是一种高速、数字、随时上网的技术，运行于标准电话线之上。

110、 **Cable Internet service** is an always-on broadband Internet access over the same infrastructure that offers cable television service.

有线互联网服务是一种在提供有线电视服务的基础设施上提供的宽带互联网接入。

111、 **Portable Internet access** is the ability to easily move your Internet service from one location to another.

便携式互联网接入是一种能够轻松地将您的 Internet 服务从一个位置移动到另一个位置的能力。

112、 **Mobile Internet access** offers a continuous Internet connection as you are walking or riding in a bus, car, train, or plane.

便携式互联网接入是一种能够轻松地将您的 Internet 服务从一个位置移动到另一个位置的能力。

113、 A **Wi-Fi hotspot** is an area in which the public can access a Wi-Fi network that offers Internet service.
Wi-Fi 热点是公众可以访问提供互联网服务的 Wi-Fi 网络的区域

114、 **VoIP (Voice over Internet Protocol)** is a technology in which a broadband Internet connection is used to place telephone calls.
VoIP(IP 电话)是一种利用宽带互联网连接进行电话通话的技术。

L7 Web and Email

115、 **The Web (short for World Wide Web)** is a collection of document, image, video, and sound files that can be linked and accessed over the Internet using a protocol called HTTP.
Web(World Wide Web)是一组文档、图像、视频和声音文件，可以通过因特网使用称为 HTTP 的协议链接和访问。

116、 A **Web page** is the product or output of one or more Web-based files displayed in a format similar to a page in a book.
网页是一个或多个基于 Web 的文件的产品或输出，其格式类似于书籍中的页面。

117、 **URL (Uniform Resource Locator, 统一资源定位符)**, unique address of every Web page.
URL(统一资源定位符)，每个网页的唯一地址。

118、 **HTML (Hypertext Markup Language, 超文本标记语言)** is a set of specifications for creating documents that a browser can display as a Web page.
HTML(超文 本标记语言)是一组用于创建浏览器可以显示为网页的文档的规范。

119、 **HTTP (Hyper Text Transport Protocol, 超文本传输协议)** is a protocol that works with TCP/IP to get web resource to desktop.
HTTP(超文本传输协议)是一种与 TCP/IP 一起工作的协议，用于将网络资源传送到桌面。

120、 **Cookies (信息记录程序)**: Small chunk of data generated by a Web server and stored in a text file on computer's hard disk of clients.
Cookie(信息记录程序)：由网络服务器生成并存储在计算机硬盘上的文本文件中的一小块数据。

121、 **Search engine** is a program designed to help people locate information on the Web by formulating simple keyword queries.
搜索引擎是一个程序，旨在帮助人们通过制定简单的关键字查询来查找 Web 上的信息。

122、 **Web crawler** is a computer program that is automated to methodically visit Web sites.
Web 爬虫是一种自动访问 Web 站点的计算机程序

123、 **Search engine indexer** is software that pulls keywords from a Web page and stores them in a database.

124、 **Search engine's query processor** looks for your search terms in search engine's indexed database and returns a list of relevant Web sites.
搜索引擎的查询处理器在搜索引擎的索引数据库中查找搜索词，并返回相关网站的列表。

125、 **Boolean operator** (布尔运行符) is a word or symbol that describes a relationship between keywords, helping you create a more focused query.
布尔运行符是描述关键字之间关系的单词或符号，可以帮助您创建更集中的查询。

126、 A **message header** contains the sender's e-mail address, the recipients' addresses, a subject line, and the date and time the message was written.
邮件标题包含发件人的电子邮件地址、收件人地址、主题行以及写入邮件的日期和时间。

127、 **E-mail attachments** are files that travel with an e-mail message.
电子邮件附件是与电子邮件一起传播的文件.

128、 **E-mail Technology**: POP3 or IMAP are used to manage incoming mail.
POP (Post Office Protocol): store emails on mail server, and download to computer when connected.
IMAP (Internet Messaging Access Protocol): similar to POP, except allowing you leave email copy on server.
SMTP (Simple Mail Transfer Protocol): Transfers e-mail messages from client computers to an e-mail server.
Web-based e-mail: access emails using a standard web browser.

电子邮件技术：POP 3 或 IMAP 用于管理收到的邮件。
POP(邮局协议)：在邮件服务器上存储电子邮件，连接后下载到计算机。
IMAP(Internet 消息访问协议)：与 POP 类似，只是允许您将电子邮件副本留在服务器上。
SMTP(简单邮件传输协议)：将电子邮件从客户端计算机传输到电子邮件服务器.
基于 Web 的电子邮件：使用标准的 Web 浏览器访问电子邮件。