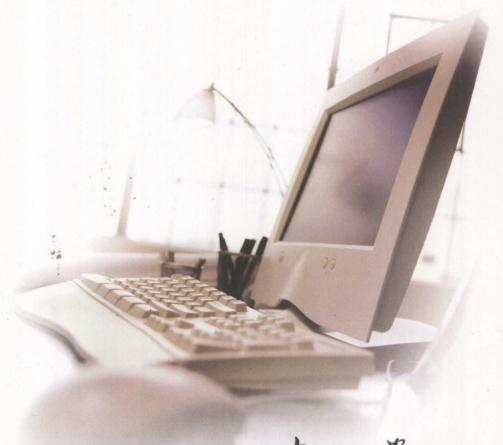
张强华 司爱侠 张千帆 编著

# 计算机英语

## 实用数程

JISUANJI YINGYU SHIYONG JIAOCHENG



南周大學出版社

## 南开职业英语系列教材

## 计算机英语实用教程

张强华 司爱侠 张千帆 编著

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## 南开职业英语系列教材

## 丛书前言

随着我国改革开放的发展和国际经济一体化进程的加快,英语学习越来越受到重视。学习英语的根本目的在于培养英语的运用能力,尤其是在各行各业实际工作中的应用能力,仅仅通过一些考试,拿到若干证书是远远不够的。近几年的就业市场对英语的要求也发生了转变,从重视公共英语能力转向重视行业英语能力。许多招聘机构都在面试环节增加了对行业英语的测试。一些职业证书考试也包括了行业英语能力测试。因此,高校也普遍开设了相应的专业英语课程,以培养学生的职场竞争力。社会上各种行业英语培训班日益火爆,从业人员急切地自我充电。正是为了满足这些需要,我们编写了这套南开"职业英语系列教材"。

本丛书遵循以下原则:其一,拟真。我们在编写时充分考虑当前职场的实际状况,尽可能多地从应用角度取材,以期读者在学过本丛书后,感觉工作中的文献资料就像是书中的一个单元。其二,新颖。我们对各专业的最新发展都给予非常充分的关注。许多材料非常新颖,其出现可能才几个月,而不像其他同类书取材自数年之前的资料。其三,综合服务。我们认为,教材不仅仅是一本书,而且还是一个服务项目,因此,我们会为教师提供教学大纲、电子教案及参考试卷,也会向读者提供答疑解惑。其四,动态维护。我们会根据行业情况的发展,不定期地修订教材。

本丛书的主编已经有 17 年的专业英语教材编写经验,多部教材入选国家"十五"及"十一五"规划教材,并成为全国畅销书。本丛书的作者都有编写教材的经验,都在教学一线,有从事行业工作的实际经历。

本丛书可作为普通高校专业英语教材;各种短期培训班使用本丛书亦颇得当;个人使用本丛书充电也可极有收益。

受我们才学之窘、时间之迫,书中必有不当之处,望各位读者不吝赐教。

司爱侠 2007.10.5

## 南开职业英语系列教材

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## 前言

计算机行业的从业人员往往需要通过英语资料来了解和掌握最新技术。因此,职场对 从业人员的专业英语水平要求很高。本书就是面向职场而编写的计算机英语教材。

本书体例上以 Unit 为单位,每一 Unit 由以下几部分组成:课文——涵盖了基础知识、主流技术、常用软件和常规设备;单词——给出课文中出现的新词,读者由此可以积累计算机专业的基本词汇;词组——给出课文中的常用词组;缩略语——给出课文中出现的、业内人士必须掌握的缩略语;Notes——讲解课文中出现的疑难句子,培养读者的阅读理解能力;习题——既能巩固所学知识,也可准备行业考试;阅读材料——提供最新的行业资料,进一步扩大读者的视野。书后附有习题参考答案,以供读者检查学习效果。

本书既考虑了教学需要,也兼顾了计算机行业的一些考试,提供了近十年的计算机程 序员考试中的"计算机英语"试题。

本书作者已经出版了六部计算机英语教材(其中两部获奖),有近二十年的相关经验。 结合学生情况,面对学生毕业后的就业环境,根据未来工作实际的要求,本书作了切合实 际的精心加工。

在使用本书过程中,如有任何问题,都可以通过电子邮件与我们交流。我们一定会给予答复。邮件标题请注明姓名及"计算机英语实用教程(南开大学版)"字样,否则会被当作垃圾邮件删除。如果读者没有收到我们的回复,请再次联系。也可通过出版社与我们联系。

望大家不吝赐教,我们的 Email 地址如下:

## zqh3882355@sina.com; cici12323@tom.com

本教程由张强华选材并编写词汇部分,司爱侠编写 Notes 与练习部分,张千帆完成课文翻译,最后由张强华和司爱侠统稿。

本书既可作为高等院校信息类(包括计算机科学与工程、计算机应用与维护、计算机 网络、软件工程、信息管理等专业)的专业英语教材,也可供参加计算机行业各种考试的 读者备考之用。作为培训班教材和供从业人员自学,亦颇得当。

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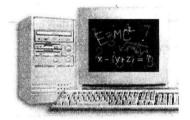
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## **Text A**

## Hardware (1)

Hardware refers to objects that you can actually touch, like disks, disk drives, display screens, keyboards, printers, boards, and chips. In contrast, software is untouchable. Software exists as ideas, concepts, and symbols, but it has no substance.

Books provide a useful analogy. The pages and the ink are the hardware, while the words, sentences, paragraphs, and the overall meaning are the software. A computer without software is like a book full of blank pages—you need software to make the computer useful just as you need words to make a book meaningful.



#### 1. Disk

Disk is a round plate on which data can be encoded. There are two basic types of disks: magnetic disks and optical disks.

On magnetic disks, data is encoded as microscopic magnetized needles on the disk's surface. You can record and erase data on a magnetic disk any number of times, just as you can with a cassette tape. Magnetic disks come in a number of different forms:

- floppy disk: A typical 5.25-inch floppy disk can hold 360 KB (kilobytes) or 1.2 MB (megabytes). 3.5-inch floppies normally store 720 KB, 1.2 MB or 1.44 MB of data.
- hard disk: Hard disks can store anywhere from 20MB to more than 200 GB (gigabytes). Hard disks are also from 10 to 100 times faster than floppy disks.
- removable cartridge: Removable cartridges are hard disks encased in a metal or plastic cartridge, so you can remove them just like a floppy disk. Removable cartridges are very fast, though usually not as fast as fixed hard disks.

Optical disks record data by burning microscopic holes in the surface of the disk with laser. To read the disk, another laser beam shines on the disk and detects the holes by changes in the reflection pattern.

Optical disks come in three basic forms:

- CD-ROM: Most optical disks are read-only. When you purchase them, they are already filled with data. You can read the data from a CD-ROM, but you cannot modify, delete, or write new data.
- WORM: It stands for write-once, read-many. WORM disks can be written on once and then read any number of times; however, you need a special WORM disk drive to write data onto a WORM disk.
- EO: It stands for erasable optical. EO disks can be read to, written to, and erased just like magnetic disks.

The machine that spins a disk is called a disk drive. Within each disk drive are one or more heads (often called read/write heads) that actually read and write data.

Accessing data from a disk is not as fast as accessing data from main memory, but disks are much cheaper. And unlike RAM (random access memory), disks hold on to data even when the computer is turned off. Consequently, disks are the storage medium of choice for most types of data. Another storage medium is magnetic tape. But tapes are used only for backup and archiving because they are sequential-access devices, that is, to access data in the middle of a tape, the tape drive must pass through all the preceding data.

A new disk, called a blank disk, has no data on it. Before you can store data on a blank disk, however, you must format it.

#### 2. Disk Drive

It is a machine that reads data from and writes data onto a disk. A disk drive rotates the disk very fast and has one or more heads that read and write data.

There are different types of disk drives for different types of disks. For example, a hard disk drive (HDD) reads and writes hard disks, and a floppy disk drive (FDD) accesses floppy disks. A magnetic disk drive reads magnetic disks, and an optical drive reads optical disks.

Disk drives can be either internal (housed within the computer) or external (housed in a separate box that connects to the computer).

#### 3. Display Screen

It is the display part of a monitor. Most display screens work under the same principle as a television, using a cathode ray tube (CRT). Consequently, the term CRT is often used in place of display screen.

#### 4. Monitor

It is another term for display screen. The term monitor, however, usually refers to the entire box, whereas display screen can mean just the screen. In addition, the term monitor often implies graphic capabilities.

There are many ways to classify monitors. The most basic is in terms of color capabilities, which separate monitors into three classes:

- monochrome: Monochrome monitors actually display two colors, one for the background and one for the foreground. The colors can be black and white, green and black, or amber and black.
- gray-scale: A gray-scale monitor is a special type of monochrome monitor capable of displaying different shades of gray.
- color: Color monitors can display anywhere from 16 to over 1 million different colors. Color monitors are sometimes called RGB monitors because they accept three separate signals—red, green, and blue.

After this classification, the most important aspect of a monitor is its screen size. Like televisions, screen sizes are measured in diagonal inches, the distance from one corner to the opposite corner diagonally. A typical size for small VGA monitors is 14 inches. Monitors that are 16 or more inches diagonally are often called full-page monitors. In addition to their size, monitors can be either portrait (height greater than width) or landscape (width greater than height). Larger landscape monitors can display two full pages, side by side. The screen size is sometimes misleading because there is always an area around the edge of the screen that can't be used. Therefore, monitor manufacturers must now also state the viewable area—that is, the area of screen that is actually used.

The resolution of a monitor indicates how densely packed the pixels are. In general, the more pixels (often expressed in dots per inch), the sharper the image. Most modern monitors can display 1024 by 768 pixels, the SVGA standard. Some high-end models can display 1280 by 1024, or even 1600 by 1200.

Another common way of classifying monitors is in terms of the type of signal they accept: analog or digital. Nearly all modern monitors accept analog signals, which is required by the VGA, SVGA, 8514/A, and other high-resolution color standards.

A few monitors are fixed frequency, which means that they accept input at only one frequency. Most monitors, however, are multiscanning, which means that they automatically adjust themselves to the frequency of the signals being sent to it. This means that they can display images at different resolutions, depending on the data being sent to them by the video adapters.

Other factors that determine a monitor's quality include the following:

- bandwidth: The range of signal frequencies the monitor can handle. This determines how much data it can process and therefore how fast it can refresh at higher resolutions.
- refresh rate: How many times per second the screen is refreshed (redrawn). To avoid flickering, the refresh rate should be at least 72 Hz.
- interlaced or non-interlaced: Interlacing is a technique that enables a monitor to have more resolution, but it reduces the monitor's reaction speed.
- dot pitch: The amount of space between each pixel. The smaller the dot pitch, the sharper the image.

## **New Words**

hardware	[ˈhɑːdwɛə]	<i>n.</i> 硬件
disk	[disk]	n. 磁盘
drive	[draiv]	n. 驱动器
		v. 驱动
display	[di'splei]	vt. 显示
		n. 显示器
screen	[skriːn]	n. 屏幕
keyboard	[ˈkiːbɔːd]	n. 键盘
printer	['printə]	n. 打印机
board	[b:cd]	n. 电路板
chip	[t∫ip]	n. 芯片
software	[ˈsɔftwɛə]	n. 软件
substance	[ˈsʌbstəns]	n. 实体
data	('deitə]	n. 资料, 数据
encode	[inˈkəud]	vt. 编码, 把(电文、情报等)译成电码(或密码)
type	[taip]	n. 类型, 字体
		ν. 打字
magnetic	[mæg'netik]	adj. 磁的,有磁性的
optical	['aptikəl]	adj. 光学的
record	[ˈrekɔːd]	n. 记录,档案
	[re'kɔ:d]	vt. 记录,标明,将······录音
erase	[iˈreiz]	vt. 删除,抹去,擦掉,消磁
tape	[teip]	n. 带子,带,录音带,磁带
hold	[həuld]	vt. 保存,支持,占据,持有,拥有
store	[:cta]	vt. 存储
		n. 仓库, 库房
removable	[ri'mu:vəbl]	adj. 抽取式的,可移动的
cartridge	[ˈkaːtridʒ]	n. 盒, 匣
fix	[fiks]	vt. 使固定,装置,修理,准备,安装
		vi. 固定
burn	[bə:n]	v. 刻录
laser	[ˈleizə]	n. 激光, 激光器
beam	[biːm]	n. 光東, 柱, 电波
detect	[di'tekt]	vt. 检查,探测
reflection	[riˈflek∫ən]	n. 反射,映像,倒影

spin	[spin]	v. & n. 旋转
head	[hed]	n. 磁头
access	[ˈækses]	vt. 存取,接近
		n. 通路,访问,入门
memory	['meməri]	n. 存储器, 内存
cheap	[tʃi:p]	adj. 便宜的,廉价的
medium	[ˈmiːdjəm]	n. 媒体,媒介,方法
	•	adj. 中间的,中等的
storage	[ˈstɔridʒ]	n. 贮藏(量), 贮藏库, 存储
backup	[ˈbækʌp]	n. 备份,后援
·		vt. 做备份
archive	[ˈɑːkaiv]	vt. 存档
		n. 档案文件
sequential	[siˈkwinʃəl]	adj. 连续的,顺序的
format	[ˈfɔːmæt]	vt. 格式化
		n. 形式,格式
rotate	[rəuˈteit]	v. (使)旋转
internal	[in'tə:nəl]	<i>adj</i> . 内部的,在内部的
external	[eks'tə:nəl]	adj. 外部的
separate	['sepereit]	adj. 分开的,分离的,个别的,单独的
connect	[kəˈnekt]	vt. & vi. 连接,结合,连结
monitor	[ˈmɔnitə]	n. 监视器, 监控器
		v. 监控
cathode	[ˈkæθəud]	n. 阴极
graphic	[ˈgræfik]	adj. 图示的,图解的
capability	[ˌkeipəˈbiliti]	n. (实际)能力,性能,容量
classify	[ˈklæsifai]	vt. 分类,分等
monochrome	[ˈmɔnəukrəum]	n. 单色
		adj. 单色的
background	[ˈbækgraund]	n. 背景, 后台
foreground	['fo:graund]	n. 前景
shade	[ʃeid]	n. 阴影,稍有不同的颜色
amber	[ˈæmbə]	n. 琥珀,琥珀色
gray	[grei]	n. 灰色
accept	[ək'sept]	vt. 接受,认可,承担
		vi. 同意,承认
signal	[ˈsignl]	n. 信号
		<i>adj</i> . 信号的
		v. 发信号,用信号通知

classification	[ˌklæsifiˈkeiʃən]	n. 分类,分级
measure	[ˈmeʒə]	n. 尺寸, 方法, 测量, 措施
		vt. 测量,测度
diagonal	[dai'ægənl]	adj. 斜的,斜纹的,对角线的
		n. 对角线
portrait	[ˈpɔ:trit]	n. 纵向
landscape	[ˈlændskeip]	n. 横向
misleading	[misˈliːdiŋ]	adj. 易误解的,令人误解的
edge	[edʒ]	n. 边缘
manufacturer	['mænjuˈfæktʃərə]	n. 制造业者,厂商
viewable	[ˈvju:əbl]	adj. 看得见的
resolution	[ˌrezəˈljuːʃən]	n. 分辨率
pixel	[ˈpiksəl]	n. 像素
analog	[ˈænəlɔg]	adj. 模拟的
		n. 类似物, 相似体
digital	[ˈdidʒitl]	adj. 数字的,数位的
standard	[ˈstændəd]	n. 标准,规格
		adj. 标准的
frequency	[ˈfriːkwənsi]	n. 频率, 周率
input	['input]	n.&v. 输入
adjust	[əˈdʒʌst]	vt. 调整,调节,校准,使适合
image	[ˈimidʒ]	n. 图像
video	[ˈvidiəu]	n. 视频
		adj. 视频的
adapter	[əˈdæptə]	n. 适配器; 多头电源插座
bandwidth	[ˈbændwitθ]	n. 带宽, 频带宽度
range	[reindʒ]	n. 范围
		vt. 排列
handle	[ˈhændl]	n. 柄, 句柄
		vt. 处理,操作
process	['prəses]	n. 过程,作用,方法,程序,步骤,进行
		vt. 加工,处理
refresh	[riˈfreʃ]	v. 刷新,更新
flickering	[ˈflikəriŋ]	adj. 闪烁的,摇曳的,忽隐忽现的,一闪一闪的
interlace	[,intəˈleis]	vi. 隔行扫描
		adj. 交织的,交错的
reaction	[riːˈækʃən]	n. 反应,反作用

## **Phrases**

refer to

in contrast just as

round plate

magnetic disk

optical disk

floppy disk

hard disk

removable cartridge

turn off

full-page monitor

side by side

dots per inch

depend on

refresh rate

dot pitch

涉及,提到,谈到,查阅

相反, 大不相同

就如,正像

圆盘

磁盘

光盘

软盘

硬盘

移动硬盘

关闭

全屏幕显示器

并排,并肩

每英寸点阵数

依靠, 依赖

刷新率

点距

## **Abbreviations**

KB (KiloBytes)

MB (MegaBytes)

GB (GigaBytes)

CD-ROM (Compact Disc-Read Only Memory)

WORM (Write Once Read Many)

EO (Electric Optical)

RAM (Random Access Memory)

HDD (Hard Disk Drive)

FDD (Floppy Disk Drive)

CRT (Cathode Ray Tube)

RGB (Red-Green-Blue)

VGA (Video Graphics Array)

SVGA (Super Video Graphics Array)

Hz (Hertz)

千字节

兆字节

吉字节

光盘驱动器

一次写入,多次读写

光电盘

随机存储器

硬盘驱动器

软盘驱动器

阴极射线管

红绿蓝 (三原色)

视频图形阵列

超级视频图形阵列

赫兹