新编
计算机英语教程
Computer English

钟庆伦　张　政　徐光衷　石洪宇

西安交通大学出版社

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内容提要

本书共有19个单元，每单元由课文、单词、词组、注释、填空、判断正误、阅读理解、翻译等组成。书后附有参考译文和答案，供读者自检自测。本书可作为大、中专学生的专业英语教材，也可供计算机爱好者和英语爱好者使用，旨在提高读者实际使用英语的能力及计算机的知识，达到事半功倍的效果。

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前　言

自20世纪40年代第一台计算机问世以来，其发展速度是任何其它领域无法比拟的，硬件每三年左右更新一次，而软件大约一年更新一次版本，昨天还是陌生的“声霸”、“多媒体”、“互联网”，今天已不再新鲜。计算机的应用更是史无前例，无论从工业、农业、国防到人们的日常生活，还是从航天、制药、生化到遗传工程，计算机无处不在，可以说21世经是计算机的世纪，没有计算机人们将一事无成。因此，要了解计算机的发展方向，掌握最新的计算机技术，就要求计算机行业的人有较高的外语水平，可以毫不夸张地说，外语水平如何是决定计算机技术人员成就的重要因素之一。

为了提高读者的实际使用英语的能力，我们编写了这本《新编计算机英语教程》，该书共分19个单元，每单元由课文、词汇和练习组成。课文均出自英美原文，语言地道、规范；练习由填空、判断正误、阅读理解、翻译等，旨在检查读者对课文的理解和掌握。

在成书的过程中，美籍专家埃夫雷斯特·梅茨勒(Everest Metzler)给于热情的帮助，并提出了宝贵的意见，洛阳工学院计算机专业的研究生郭跟成、管萍同学翻译了大部分课文。在此向他们表示感谢。

本书可作为大、中专学生的专业英语教材和各类计算机短训班教材，也可供计算机爱好者和英语爱好者使用。由于时间仓促，在编写中难免有不当之处，请读者不吝赐教。

编　者

1997年　　月

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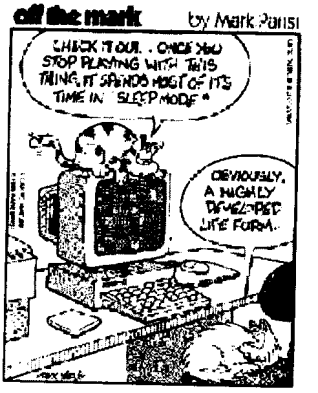
Unit 1



DEFINTION: Computer—A device designed to speed and automate errors.

Microcomputer

Its Origins and Developments

Microcomputer is a desktop-or notebook-size computing device that uses a microprocessor as its central processing unit, or CPU[1]. Microcomputers are also called personal computers (PCs)[2], home computers, small-business computers, and micros. The smallest, most compact are called laptops. When they first appeared, they were considered single-user devices, and they were capable of handling only four, eight, or 16 bits of information at one time. More recently the distinction between microcomputers and large, mainframe computers (as well as the smaller mainframe-type systems called minicomputers) has become blurred, as newer microcomputer models have increased the speed and data-handling capabilities of their CPUs into 32-bit or even 64-bit multiuser range.

Microcomputers are designed for use in homes, schools, and office settings. Within the home, they can serve both as a tool for home management (balancing the family checkbook, structuring the family budget, indexing recipes) and as a recreational device (playing computer games, cataloging records and books). Schoolchildren can use microcomputers for doing their homework, and in fact many public schools now employ the devices for programmed learning and computer-literacy courses. Small businesses may purchase microcomputers for word processing, bookkeeping, and the storage and handling of mailing lists.

Origins

Microcomputers were made possible by two technical innovations in the field of microelectronics: the integrated circuit, or IC[3], which was developed in 1959; and the microprocessor, which first

appeared in 1971. The IC permitted the miniaturization of computer-memory circuits, and the microprocessor reduced the size of a computer's CPU to the size of a single silicon chip.

Because a CPU calculates, performs logical operations, contains operating instructions, and manages data flows, the potential existed for developing a separate system that could function as a complete microcomputer. The first such desktop-size system specifically designed for personal use appeared in 1974; it was offered by Micro Instrumentaion Telemetry Systems(MITS)[4]. The owners of the system were then encouraged by the editor of a popular technology magazine to create and sell a mail-order computer kit through the magazine. The computer, which was called Altair, retailed for slightly less than $400. The demand for the microcomputer kit was immediate, unexpected, and totally overwhelming. Scores of small entrepreneurial companies responded to this demand by producing computers for the new market. The first major electronics firm to manufacture and sell personal computers, Tandy Corporation, introduced its model in 1977. It quickly dominated the field, because of the combination of two attractive features: a keyboard and a cathode-ray display terminal(CRT)[5]. It was also popular because it could be programmed and the user was able to store information by means of cassette tape.

Soon after Tandy's new model was introduced, two engineer-programmers—Stephen Wozniak and Steven Jobs—started a new computer manufacturing company named Apple Computers[6]. Some of the new features they introduced into their own microcomputers

were expanded memory, inexpensive disk-drive programs and data storage, and color graphics. Apple Computers went on to become the fastest-growing company in U. S. business history. Its rapid growth inspired a large number of similar microcomputer manufacturers to enter the field. Before the end of the decade, the market for personal computers had become clearly defined.

In 1981, IBM[7] introduced its own microcomputer model, the IBM PC. Although it did not make use of the most recent computer technology, the PC was a milestone in this burgeoning field. It proved that the microcomputer industry was more than a current fad, and that the microcomputer was in fact a necessary tool for the business community. The PC's use of a 16-bit microprocessor initiated the development of faster and more powerful micros, and its use of an operating system that was available to all other computer makers led to a standardization of the industry.

Later Developments

In the mid-1980s, a number of other developments were especially important for the growth of microcomputes. One of these was the introduction of a powerful 32-bit computer capable of running advanced multi-user operating systems at high speeds. This has dulled the distinction between microcomputers and minicomputers, placing enough computing power on an office desktop to serve all small businesses and most medium-size businesses.

Another innovation was the introduction of simpler, "user-friendly" methods for controlling the operations of microcomputers.

By substituting a graphical user interface (GUI) for the conventional operating system, computers such as the Apple Macintosh allow the user to select icons – graphic symbols of computer functions – from a display screen instead of requiring typed commands. New voice-controlled systems are now available, and users may eventually be able to use the words and syntax of spoken language to operate their microcomputers.

New Words

microcomputer ['maikroukəm'pju:tə] n. 微型计算机,微电脑,微机
desktop ['desktɔp] n. 桌面
notebook-size ['noutbuk'saiz] 笔记本大小的
device [di'vais] n. 设备
microprocessor [ˌmaikrou'prousesə] n. 微处理器
compact [kəm'pækt] a. 紧密的
lap-top [læp'tɔp] n. 膝上型(计算机)
handle ['hændl] vt. 处理 ,操作
distinction [dis'tiŋkʃən] n. 区别
mainframe ['meinfreim] n. 主机
minicomputer ['minikəmpju:tə] n. 小型机
blur [blə:] vt. 使模糊
multi-user ['mʌlti'ju:zə] n. 多用户
range ['reindʒ] n. 范围
setting ['setiŋ] n. 环境,背景
balance ['bæləns] vt. 使平衡,结算
checkbook ['tʃekbuk] n. 支票簿

structure ['strʌktʃə] n. vt. 组织,结构
budget ['bʌdʒit] n. 预算
index ['indeks] n. 索引;vt. 编入索引中
recipe ['resipi] n. 食谱,处方,秘诀
recreational [rekri'eiʃənəl] a. 娱乐的,休养的
catalog ['kætələg] n. 目录;vt. 编目录
literacy ['litərəsi] n. 识字,读写能力
purchase ['pə:tʃəs] n. 购买;vt. 购买,赢得,努力取得
bookkeeping ['bukki:piŋ] n. 簿记
origin ['ɔridʒin] n. 起源
innovation [inou'veiʃən] n. 改革,创新
microelectronics ['maikrouilek'trɔniks] n. 微电子学
miniaturization [minjətʃərai'zeiʃən] n. 小形化
memory ['meməri] n. 内存,存储器
silicon ['silikən] n. 硅,硅元素
chip [tʃip] n. 晶片
calculate ['kælkjuleit] v. 计算
perform [pə'fɔ:m] vt. 执行,完成
logical ['lɔdʒikl] a. 逻辑的
operation [ɔpə'reiʃən] n. 操作,运算
dataflow ['deitəflou] 数据流
potential [pə'tenʃəl] n. 潜力,潜能,潜在性
telemetry [ti'lemitri] n. 遥感探测,自测量
mail-order [meil'ɔ:də] n. v. 邮购
kit [kit] n. 套件
retail [ri'teil] n. v. 零售
overwhelming [ˌouvə'hwelmiŋ] a. 压倒性的,无法抵抗的
entrepreneur [ˌɔntrəprə'nə:] n. 企业家,主办人

dominate [ˈdɔmineit] v. 支配,占优势
feature [ˈfi:tʃə] n. 特征,特色
cassette tape n. 盒式磁带
expand [iksˈpænd] vt. 扩张,使膨胀
expanded memory 扩展内存
disk-drive n. 磁盘驱动器
inspire [inˈspaiə] vt. 激发,启示,鼓舞;vi. 吸入,赋予灵感
milestone [ˈmailstoun] n. 里程碑
burgeon [ˈbə:dʒən] n. 芽;v. 萌芽
fad [fæd] n. 时尚,一时流行的狂热
community [kəˈmju:niti] n. 社区,共同体
initiate [iˈniʃieit] vt. 开始
dull [dʌl] vt. 缓和,使迟钝
substitute [ˈsʌbstitju:t] n. v. 代替,代理
conventional [kənˈvenʃənl] a. 传统的,约定的,习惯的
icon [ˈaikɔn] n. 图标
symbol [ˈsimbl] n. 符号
eventually [iˈventʃuəli] adv. 最后,终于

Phrases and Expressions

be capable of 能够
at one time 每次
serve as 作为……起作用
in the field of 在……领域
by means of 通过……的方法;借助于
lead to 导致
a number of 若干;许多

Notes

1. CPU: Central Processing Unit 的缩写，中央处理单元
2. PC: Personal Computer 的缩写，个人计算机
3. IC: Integrated Circuit 的缩写，集成电路
4. MITS: Micro Instrumentation Telemetry System 的缩写，微型遥感测量仪器系统公司
5. CRT: Cathode-Ray Tube 的缩写，阴极射线管
6. Apple Computers: 苹果计算机公司
7. IBM: International Business Machine Corporation 的缩写，国际商用机器有限公司
8. GUI: Graphical User Interface 的缩写，图形用户接口

Exercises

I. Explain the following abbreviations.

1. CPU:_____
2. PC: _____
3. IC: _____
4. CRT:_____
5. IBM:_____
6. GUI:_____

II. True or False?

1. The central processing unit is the heart of a computer.
2. Nowadays, there are still great distinctions between microcomputers and minicomputers, especially in speed.

3. IBM PC is the first desktop-size system designed for personal use.
4. Without two technical innovations, i.e. IC and microprocessor, in the field of microelectronics, PC would not have appeared.
5. The market for microcomputers had been clearly defined before 1980.
6. A voice-controlled PC is nothing but a dream.

III. Fill in the blanks:

1. PCs are manufactured for use in _____, _____ and _____ settings.
2. The computer offered by MITS Corp. in 1974 was called _____.
3. In 1977, Tandy's model of computers quickly dominated the field because of its two attractive features: a _____ and a _____ which was abbreviated to CRT.
4. Some of the new features introduced by Apple company in the 1970s were _____, inexpensive _____ and _____.
5. IBM PC was a milestone in PC industry because of the use of _____ and _____.
6. In the mid-1980s, two most important developments for the growth of microcomputers were the introduction of a powerful _____ computer and of simpler, _____ methods, for controlling the operations of microcomputers.

IV. Choose the best answer.

1. Microcomputers have _____ different names.
   a. 1