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Microsoft® Press

PUBLISHED BY
Microsoft Press
A Division of Microsoft Corporation
One Microsoft Way
Redmond, Washington 98052-6399

Library of Congress Cataloging-in-Publication Data
Microsoft Press Computer Dictionary. -- 3rd ed.
p. cm.
ISBN 1-57231-446-X
1. Computers--Dictionaries. 2. Microcomputers--Dictionaries.
I. Microsoft Press.
QA76.15.M54 1997
004'.03--dc21 97-15489
CIP

Printed and bound in the United States of America.

1 2 3 4 5 6 7 8 9 QMQM 2 1 0 9 8 7

Distributed to the book trade in Canada by Macmillan of Canada, a division of Canada Publishing Corporation.

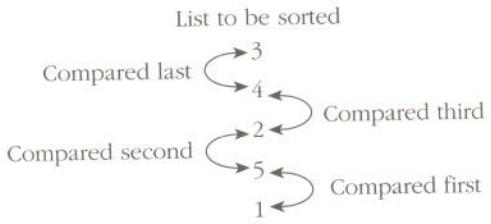
A CIP catalogue record for this book is available from the British Library.

Microsoft Press books are available through booksellers and distributors worldwide. For further information about international editions, contact your local Microsoft Corporation office. Or contact Microsoft Press International directly at fax (425) 936-7329.

Acquisitions Editor: Kim Fryer
Project Editor: Maureen Williams Zimmerman, Anne Taussig
Technical Editors: Dail Magee Jr., Gary Nelson, Jean Ross, Jim Fuchs, John Conrow, Kurt Meyer, Robert Lyon, Roslyn Lutsch

bubble memory \bub´l mem`ər-ē\ *n.* Memory formed by a series of persistent magnetic "bubbles" in a thin film substrate. In contrast to ROM, information can be written to bubble memory. In contrast to RAM, data written to bubble memory remains there until it is changed, even when the computer is turned off. For this reason, bubble memory has had some application in environments in which a computer system must be able to recover with minimal data loss in the event of a power failure. The use of and demand for bubble memory has all but disappeared because of the introduction of flash memory, which is less expensive and easier to produce. *See also* flash memory, nonvolatile memory.

bubble sort \bub´l sōrt`\ *n.* A sorting algorithm that starts at the end of a list with n elements and moves all the way through, testing the value of each adjacent pair of items and swapping them if they aren't in the right order. The entire process is then repeated for the remaining $n - 1$ items in the list, and so on, until the list is completely sorted, with the largest value at the end of the list. A bubble sort is so named because the "lightest" item in a list (the smallest) will figuratively "bubble up" to the top of the list first; then the next-lightest item bubbles up to its position, and so on. See the illustration. *Also called* exchange sort. *See also* algorithm, sort. *Compare* insertion sort, merge sort, quicksort.



List after first pass	List after second pass
1	1
3	2
4	3
2	4
5	5

Bubble sort.

bubble storage \bub´l stōr`əj\ *n.* *See* bubble memory.

bucket \buk´ət\ *n.* A region of memory that is addressable as an entity and can be used as a receptacle to hold data. *See also* bit bucket.

buffer[1] \buf´ər\ *n.* A region of memory reserved for use as an intermediate repository in which data is temporarily held while waiting to be transferred between two locations, as between an application's data area and an input/output device. A device or its adapter may in turn use a buffer to store data awaiting transfer to the computer or processing by the device.

buffer[2] \buf´ər\ *vb.* To use a region of memory to hold data that is waiting to be transferred, especially to or from input/output (I/O) devices such as disk drives and serial ports.

buffer pool \buf´ər pōōl`\ *n.* A group of memory or storage-device locations that are allocated for temporary storage, especially during transfer operations.

buffer storage \buf´ər stōr`əj\ *n.* **1.** The use of a special area in memory to hold data temporarily for processing until a program or operating system is ready to deal with it. **2.** An area of storage that is used to hold data to be passed between devices that are not synchronized or have different bit transfer rates.

bug \bug\ *n.* **1.** An error in coding or logic that causes a program to malfunction or to produce incorrect results. Minor bugs, such as a cursor that does not behave as expected, can be inconvenient or frustrating, but do not damage information. More severe bugs can require the user to restart the program or the computer, losing whatever previous work had not been saved. Worse yet are bugs that damage saved data without alerting the user. All such errors must be found and corrected by the process known as *debugging*. Because of the potential risk to important data, commercial application programs are tested and debugged as completely as possible before release. After the program becomes available, further minor bugs are corrected in the next update. A more severe bug can sometimes be fixed with a piece of software called a *patch*, which circumvents the problem or in some other way alleviates its effects. *See also* beta test,