Teach Yourself C, Third Edition

Copyright © 1997 by The McGraw-Hill Companies. All rights reserved. Printed in the United States of America. Except as permitted under the Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of the publisher, with the exception that the program listings may be entered, stored, and executed in a computer system, but they may not be reproduced for publication.

Re-print 2012

4567890 DOC 99

ISBN 0-07-882311-0

Information has been obtained by Osborne/McGraw-Hill from sources believed to be reliable. However, because of the possibility of human or mechanical error by our sources, Osborne/McGraw-Hill, or others, Osborne/McGraw-Hill does not guarantee the accuracy, adequacy, or completeness of any information and is not responsible for any errors or omissions or the results obtained from use of such information.
Contents

Preface, xi
For Further Study, xvii

1 C Fundamentals . . . 1
1.1 UNDERSTAND THE COMPONENTS OF A C PROGRAM, 2
1.2 CREATE AND COMPILE A PROGRAM, 7
1.3 DECLARE VARIABLES AND ASSIGN VALUES, 10
1.4 INPUT NUMBERS FROM THE KEYBOARD, 15
1.5 PERFORM CALCULATIONS USING ARITHMETIC EXPRESSIONS, 17
1.6 ADD COMMENTS TO A PROGRAM, 20
1.7 WRITE YOUR OWN FUNCTIONS, 23
1.8 USE FUNCTIONS TO RETURN VALUES, 27
1.9 USE FUNCTION ARGUMENTS, 32
1.10 REMEMBER THE C KEYSWORDS, 35

2 Introducing C's Program Control Statements . . . 39
2.1 BECOME FAMILIAR WITH THE if, 41
2.2 ADD THE else, 44
2.3 CREATE BLOCKS OF CODE, 46
2.4 USE THE for LOOP, 49
2.5 SUBSTITUTE C'S INCREMENT AND DECREMENT OPERATORS, 54
2.6 EXPAND printf() S CAPABILITIES, 58
2.7 PROGRAM WITH C'S RELATIONAL AND LOGICAL OPERATORS, 61

3 More C Program Control Statements . . . 69
3.1 INPUT CHARACTERS, 70
3.2 NEST if STATEMENTS, 75
3.3 EXAMINE for LOOP VARIATIONS, 79
3.4 UNDERSTAND C'S while LOOP, 82
3.5 USE THE do LOOP, 84
3.6 CREATE NESTED LOOPS, 87