

Chapter 1: Introduction

Introduction to SAS..... 1
 BASE SAS 2
 Information Storage and Retrieval 3
 Data Modification and Programming 4
 Report Writing 5
 File Handling 6
 Other SAS System Products 7

Chapter 2: Fundamentals

SAS statements..... 1
 Keyword 2
 Names 3
 SAS Program 4
 DATA STEPS and PROC STEPS 5
 Definitions 6
 Variable Attributes 7
 Writing SAS Programs 8
 SAS Variable Lists 9
 Expressions 10

Chapter 3: DATA STEP

Purpose and Function..... 1
 DATA STEP Commands..... 2
 Creating SAS Datasets 3
 Writing Reports 4
 DATA STEP Flow 5
 DATA STEP Statements..... 6
 FILE-Handling statements 7
 Action Statements 8 - 9
 Arithmetic Operators 10
 Comparison Operators 11
 Logical Operators 12

CALL Statement..... 69
 ERROR Statement 70-71
 TITLE Statement 72
 FOOTNOTE Statement 73
 LIST Statement 74
 LABEL Statement 75
 INFORMAT Statement 76
 FORMAT Statement 77
 ATTRIB Statement 78
 LENGTH Statement 79
 OPTIONS Statement 80
 PAGE Statement 81

Chapter 5: SAS Functions

Probability Functions 1
 Sample Statistic Functions 2
 Random Number Functions 3
 Character Functions 4
 Date / Time Functions 5
 State and Zip Code Functions 6
 SAS Programming 7

Chapter 6: SAS Statements Used in the PROC Step

PROC Statement..... 1
 ATTRIB Statement 2
 BY Statement 3
 CLASS Statement 4
 FORMAT Statement 5
 FREQ Statement 6
 ID Statement 7
 LABEL Statement 8
 MODEL Statement 9
 OUTPUT Statement 10
 VAR Statement 11
 WEIGHT Statement 12
 PROC SORT Command Format 13
 PROC PRINT Command Format 14
 PROC FORMAT Command Format 15
 PROC FORMAT 16

Chapter 4: SAS Statements

Types of Files the SAS Systems Can Read 1
 DATA Statements 2-5
 Using Special SAS Dataset Names..... 6
 Cards 7
 Input Statement 8-9
 Major Input Types 10
 Leading Blanks on Input 11
 Column Input 12
 LIST Input 13
 Formatted INPUT 14
 : and & FORMAT Modifiers 15
 Advanced Input Statement Features 16
 Output Statement 17
 Subsets 18-19
 DROP Statement 20
 KEEP Statement 21
 DELETE Statement 22
 OUTPUT Statement 23
 INFILE Statement 24-25
 LIST Style 26
 COLUMN Style (PUT) 27
 FORMATTED Style 28
 INFILE Examples 29
 Input Mixed Record Types 30
 STOP Statement 31
 SET Statement 32
 Concatenating Datasets 33
 Interleaving Datasets 34
 Merge Statement 35-36
 Merging with a BY Statement: Match-merging 37-38
 INFILE Format 39
 INFILE Example 40
 Options for VSAM Files 41
 FILE Statement 42-46
 Printing Titles with a PUT 47
 BY Statement 48-49
 LABELS 50
 GO TO Statement 51
 IF Statement 52
 IF _THEN and IF _THEN/ELSE Statements 53
 Subsetting IF Statement 54
 DO Statement 55-59
 DO WHILE Statement 60
 SELECT Statement 61
 ARRAY Statement 64-65
 LINK Statement 66
 RETURN Statement 67
 ABORT Statement 68

Chapter 7: Format Procedure

Function and Use 1
 Format Specifications 2
 Defining Formats 3
 PROC FORMAT Statement 4
 Temporary and Permanent Formats 5
 Format Procedure with the FORMAT Statement 6
 PICTURE Example 7
 NUMERIC Value Substitution 8
 VALUE Statement 9-10
 Inclusive and Exclusive 11
 Other Option 12
 Values Not Specified 13
 PICTURE Statement 14-15
 Digit and Message Characters 16
 PICTURE Statement 17
 FILL and PREFIX Options 18
 PICTURE Options 19
 MULT Options 20
 NOEDIT Options 21
 FORMAT Options (for VALUE or PICTURE) 22
 Character Data Limitations 23
 Examples 24-25
 Temporary and Permanent FORMATS OS BATCH 26-27
 Examples 31

Chapter 8: Base Procedures

FORMS Procedures 1-3
 PROC FORMS Statements 4
 PROC FORMS Statements Options to Control Form Placement 5-6
 PROC FORMS Statement Page Layout Options 7
 PROC FORMS Statement Other Options 8
 LINE Statement 9
 FREQ Statement 10
 BY Statement 11
 Sample Mailing Labels 12
 OS and CMS System Notes 13
 APPEND Procedure 14
 APPEND Usage Notes 15
 APPEND 16-17
 COPY PROCEDURE Overview 18
 COPY PROCEDURE Format 19
 PROC COPY Parameters 20
 PROC COPY Options 21
 PROC COPY Statement 22
 SELECT Statement 23
 PROC COPY SELECT Options 24
 EXCLUDE Statement 25-26
 Specifying Member Names 27

MVS Member Names	28
Contents Procedure.....	29
PROC Contents Format.....	30-31
Additional Options	32
Contents Options.....	33

Chapter 9: Informat and Format

INFORMAT and FORMATS	1
INFORMAT Descriptions Numeric.....	2-3
INFORMAT Descriptions Character	4
SAS Numeric and Character Formats	5-6
FORMAT Descriptions Numeric	7-10
SAS DATE, TIME and DATETIME INFORMAT Descriptions.....	11-13
Using SAS DATE, TIME, and DATETIME	12-14
DATE, TIME, and DATETIME INFORMAT Descriptions.....	15-17