



**DATABASE  
MANAGEMENT SYSTEMS  
(DBMS)**



# **DATABASE MANAGEMENT SYSTEMS (DBMS)**

**[A Practical Approach]**

• Concepts • Principles • Case Studies • Experiments (SQL)

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## PREFACE TO THE FOURTH REVISED EDITION

Many books on Database Management Systems (DBMS) are available in the market, they are incomplete very formal and dry. My attempt is to make DBMS very simple so that a student feels as if the teacher is sitting behind him and guiding him. This text is bolstered with many examples and Case Studies. In this book, the experiments are also included which are to be performed in DBMS lab. Every effort has been made to alleviate the treatment of the book for easy flow of understanding of the students as well as the professors alike.

Any suggestions to further enhance the quality of the book will be highly acknowledged.

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## PREFACE TO THE FIRST EDITION

It is indeed a matter of great pleasure to write this book entitled Database Management Systems (DBMS)—A Practical Approach. A DBMS forms the backbone of any software project. Without DBMS you risk building a system that is inefficient, slow and unreliable. This is so because DBMS is a second-tier in our multi-tier applications. It is a back-end tool available to us.

I am flattered that the first edition of this book is one of the mandatory references on DBMS. Many books on DBMS are available in the market, they tend to be dry and formal. They are often difficult and boring for students.

They lack freshness as they just give theories on DBMS and as such no practical knowledge is given. My approach is to make DBMS more interesting and concrete by giving practical examples, CASE studies and the experiments to be performed in the DBMS lab. The contents of this book can be used by practitioners to understand the state-of-practice in the software industry.

Unlike other books, I have written this book in such a simple and lucid style that makes the student feel as if the teacher is sitting behind him and guiding him. This book assimilates a comprehensive matter on the subject as it is bolstered with numerous examples. It covers the syllabi of GGSIPU, DU, UPTU, PTU, VTU, IGNOU, WBTU, RGTU, MGTU, SU and many other technical universities. It can be used as a textbook for B.E./B.Tech. (CSE/IT/EEE/ECE) and BCA courses of these universities. I have provided sufficient academic rigour to satisfy the contents of the syllabi of all the universities.

Last but not least, I would like to mention that no one is 100% accurate in this world, so any suggestions for the further improvement of this book will be highly acknowledged.

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**Er. RAJIV CHOPRA**



# DBMS—A Practical Approach

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This book is useful for the following courses:

- B.Tech. (CSE)—5<sup>th</sup> Sem., GGSIPU, Delhi.
- B.Tech. (IT)—5<sup>th</sup> Sem., GGSIPU, Delhi.
- B.Tech. (ECE/EEE)—5<sup>th</sup> Sem., GGSIPU, Delhi.
- B.Tech. (CSE)—4<sup>th</sup> Sem., BPUT, Orissa.
- B.E. (CSE)—7<sup>th</sup> Sem., Nagpur University.
- B.Tech. (CSE/IT)—2<sup>nd</sup> Sem., JNTU, Hyderabad.
- B.E. (CSE)—8<sup>th</sup> Sem., DCE (DU).
- B.Tech. (CSE)—5<sup>th</sup> Sem., Singhania University.
- B.Tech. (CSE)—4<sup>th</sup> Sem., UPTU.
- MCA—3<sup>rd</sup> Sem., Delhi University (DU).
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- M.Tech. (IT)—2<sup>nd</sup> Sem., VTU.
- M.Tech. (CSE)—1<sup>st</sup> Sem., VTU.
- M.Tech. (IS)—1<sup>st</sup> Sem., NSIT (DU), Delhi.
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