

# Pearson New International Edition

Database Systems  
The Complete Book  
Garcia-Molina Ullman Widom  
Second Edition

PEARSON

# Contents

<b>1. The Worlds of Database Systems</b>	<b>1</b>
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	
<b>2. The Relational Model of Data</b>	<b>13</b>
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	
<b>3. Design Theory for Relational Databases</b>	<b>63</b>
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	
<b>4. High-Level Database Models</b>	<b>121</b>
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	
<b>5. Algebraic and Logical Query Languages</b>	<b>199</b>
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	
<b>6. The Database Language SQL</b>	<b>237</b>
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	
<b>7. Constraints and Triggers</b>	<b>303</b>
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	
<b>8. Views and Indexes</b>	<b>333</b>
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	
<b>9. SQL in a Server Environment</b>	<b>361</b>
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	
<b>10. Advanced Topics in Relational Databases</b>	<b>417</b>
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	
<b>11. The Semistructured-Data Model</b>	<b>473</b>
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	
<b>12. Programming Languages for XML</b>	<b>507</b>
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	
<b>13. Secondary Storage Management</b>	<b>545</b>
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	

<b>14. Index Structures</b>	
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	<b>607</b>
<b>15. Query Execution</b>	
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	<b>689</b>
<b>16. The Query Compiler</b>	
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	<b>747</b>
<b>17. Coping With System Failures</b>	
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	<b>831</b>
<b>18. Concurrency Control</b>	
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	<b>871</b>
<b>19. More About Transaction Management</b>	
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	<b>941</b>
<b>20. Parallel and Distributed Databases</b>	
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	<b>973</b>
<b>21. Information Integration</b>	
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	<b>1023</b>
<b>22. Database Systems and the Internet</b>	
Hector Garcia-Molina/Jeffrey Ullman/Jennifer Widom	<b>1079</b>
<b>Index</b>	<b>1121</b>