

ERRATA
for
Database System Concepts, 5th Edition
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ERRATA FOR FIRST PRINTING:

Chapter 2

Page 62: The last-but-one paragraph in this page (starting with “There are cases ..”) should be moved above the query
 $G_{\text{count-distinct}}(\text{branch_name})(\text{pt_works})$

Page 71, Column 2, Line 1: “Division /” → “Division ÷”

Chapter 3

Page 76, lines 2 and 3: “(2)” → “(Chapter 2)”, “(5)” → “(Chapter 5)”, and “It includes also ..” → “It also includes ..”.

Page 78, para 2 (the paragraph starting with Figure 3.2): Change “would not be a primary key *customer*;” → “would not be a primary key for the *customer* relation;”

Page 98, Section 3.8.2: This section uses the term “view” which is defined only later in Section 3.9.1. We suggest reading the entire Section 3.8 (Complex Queries) after reading Section 3.9.

Page 106, para 2: Change “which we discuss in Section 3.2.” → “as we discuss later in Section 4.2.2.”

Page 111, line 1: Change “condition joins” → “theta joins”.

Page 111, para 2, line 2: Change “simple example of inner joins.” → “simple example of a join; SQL uses the term *inner join* to denote a join, to distinguish it from an outer join).”

Page 116, Figure 3.11: Change the second attribute of *participated* from *car* to *license*,

Page 120, Exercise 3.22: Attribute *student_id* of relation *student*, and attributes *student_id* and *course_id* of relation *registered* should be underlined to denote that they are primary key attributes.

Page 120, Exercise 3.23: Attribute *student_id* of relation *marks* should be underlined to denote that it is a primary key attribute.

Chapter 4

Page 152, Figure 4.12, last-but-one line: Add a space between **table** and *empl*.

Page 155, Section 4.8, Para 1: Drop the sentence “We covered the basics of SQL earlier in this chapter.”

Change “some of the more complex features of SQL” → “some new features added to SQL as part of SQL:2003.”

Replace the sentence starting with “Many of these features ..” by “You should be aware that not all database systems support these features.”

¹Errors reported by: H. K. Park, Fernando Senz Prez, Barry Soroka, Rajarshi Rakshit, Sandeep Satpal, Amon Seagull and Praveen Ranjan Srivastava. Your help is deeply appreciated.

Chapter 5

Page 197, Figure 5.15: Change the second attribute of *participated* from *car* to *license*,

Chapter 6

Page 211, Bullet 1: Change “**Oneto-one**” → “**One-to-one**”.

Page 211, Bullet 2: Change “**One-to -many**” → “**One-to-many**”.

Page 212 Para 3 (the paragraph just before Section 6.2.3.1 Entity Sets): At the end of this para, add the sentence:

“Recall the definition of keys for relations, from Section 2.1.3; we now define corresponding notions of keys for entities and relationships.”

Page 241, Section 6.9.1: $loan = (loan_number, amount) \rightarrow loan = (\underline{loan_number}, amount)$

Page 244, Section 6.9.3.2:

$account = (account_number, balance, branch_name)$
 $branch = (branch_name, branch_city, assets)$

→

$account = (\underline{account_number}, balance, branch_name)$
 $branch = (\underline{branch_name}, branch_city, assets)$

Page 244, Figure 6.27: Attribute *account_number* should be underlined.

Page 246, bullet 2:

$employee = (person_id, name, street, city, salary)$
 $customer = (person_id, name, street, city, credit_rating)$

→

$employee = (\underline{person_id}, name, street, city, salary)$
 $customer = (\underline{person_id}, name, street, city, credit_rating)$

Chapter 7

Page 270 (4th line from bottom): In “.. a pair of attributes (*customer_id*, *loan_amount*) ..”
change $loan_amout \rightarrow loan_number$

Page 288: Change the heading of Section 7.5 from “Decomposition Using Functional Dependencies” → “Algorithms for Decomposition” here, and also in the table of contents. (Section 7.3 also has the heading “Decomposition Using Functional Dependencies”, which should not be changed.)

Page 290, first bullet: “.. holds on , but ..” → “.. holds, ..”

Page 291, last-but-one para: $(customer_id, employee_id \rightarrow branch_name, type)$

→

$customer_id, employee_id \rightarrow branch_name, type$

Chapter 8

Page 322, Figure 8.6: “`result.setContentType("text/html");`” → “`response.setContentType("text/html");`”

Page 338, 3rd line from bottom: “*system-administrator*” → “*system_administrator*”

Page 354, Exercise 8.22: In “<https://mybank.com>, the the HTTPS protocol”, delete one of the two occurrences of “the”.

Chapter 9

Page 365: In “*city* **varchar**(20)
zipcode **varchar**(9)”,
add a comma after “*zipcode*”.

Page 366: In “*name* **row**(...*lastname* **varchar**(20))
address **row**(...”
add a comma after “**varchar**(20))”.

Page 366: In “*city* **varchar**(20)
zipcode **varchar**(9)”,
add a comma after “*zipcode*”.

Page 378, last-but-one bullet item: In “Each table stores the primary key (...) and the attributes are defined locally”, change “attributes are” → “attributes that are”.

Chapter 10

Page 415, 1st query: change “**for**\$d in /bank/...” → “**for** \$d in /bank/...”

Chapter 11

Page 449, 3 lines from bottom: In “NV-RAM buffers are ... found in in RAID controllers”
change “in in” → “in”.

Page 458, last line: Change “They have a fairly large capacity (640 megabytes), ..”
→ “They have a storage capacity of 640 to 700 megabytes, ..”

Chapter 12

Page 483, Figure 12.1: The left part of this figure (with the table containing “Brighton”, “Mianus” and “Redwood”, and associated pointers) should be deleted.

Page 495, Figure 12.13: In procedure `insert_in_leaf`,
“Let K_i be the least value in L that is less than K ” → “Let K_i be the highest value in L that is less than K ”.

Chapter 13

Page 542, Para 2, Line 2:

In “Run generation requires seeks for reading data for each of the two runs and as well as for writing the run.”
change “two runs” → “runs”, and
“the run.” → “the runs.”.

Page 549, bullet numbered 1:

In “Sorting the relation *customer* ... $400 * (2^{\lceil \log_{24}(400/25) \rceil} + 1) = 1200$ block transfers.”
change “ $400 * (2^{\lceil \log_{24}(400/25) \rceil} + 1)$ ” → “ $400 * (2^{\lceil \log_{24}(400/25) \rceil} + 1)$ ”.

Page 552, third para, one line from bottom: Change

“We can use a memory ... up to $3K * 3K$, which is is 36 gigabytes”
→ “We can use a memory ... up to $3K * 3K$ blocks, which is 36 gigabytes”

Chapter 14

Page 600, Exercise 14.2(a): $\sigma_{B<4}({}_A\mathcal{G}_{\max(B)}(R))$ and ${}_A\mathcal{G}_{\max(B)}(\sigma_{B<4}(R))$
 \rightarrow
 $\sigma_{B<4}({}_A\mathcal{G}_{\max(B)} \text{ as } B(R))$ and ${}_A\mathcal{G}_{\max(B)} \text{ as } B(\sigma_{B<4}(R))$.

Chapter 16

Page 637, Figure 16.4, replace $\text{grant-X}(A, T_2) \rightarrow \text{grant-X}(A, T_1)$

Chapter 28

Page 1037, in the heading of Section 28.5: “Multidimensional” \rightarrow “Multidimensional”.