



**Kampus
Merdeka**
INDONESIA JAYA



Relation Representation

Bachelor of Information Systems

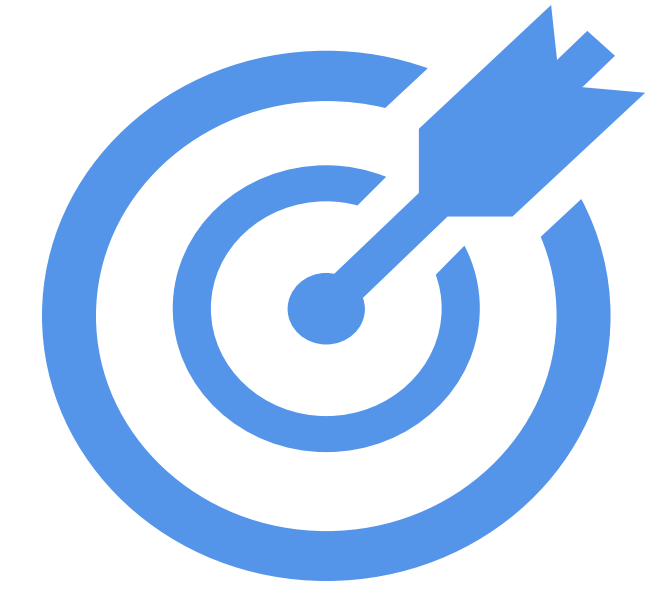


INTRODUCTION TO
DATABASE AND INFORMATION SYSTEM



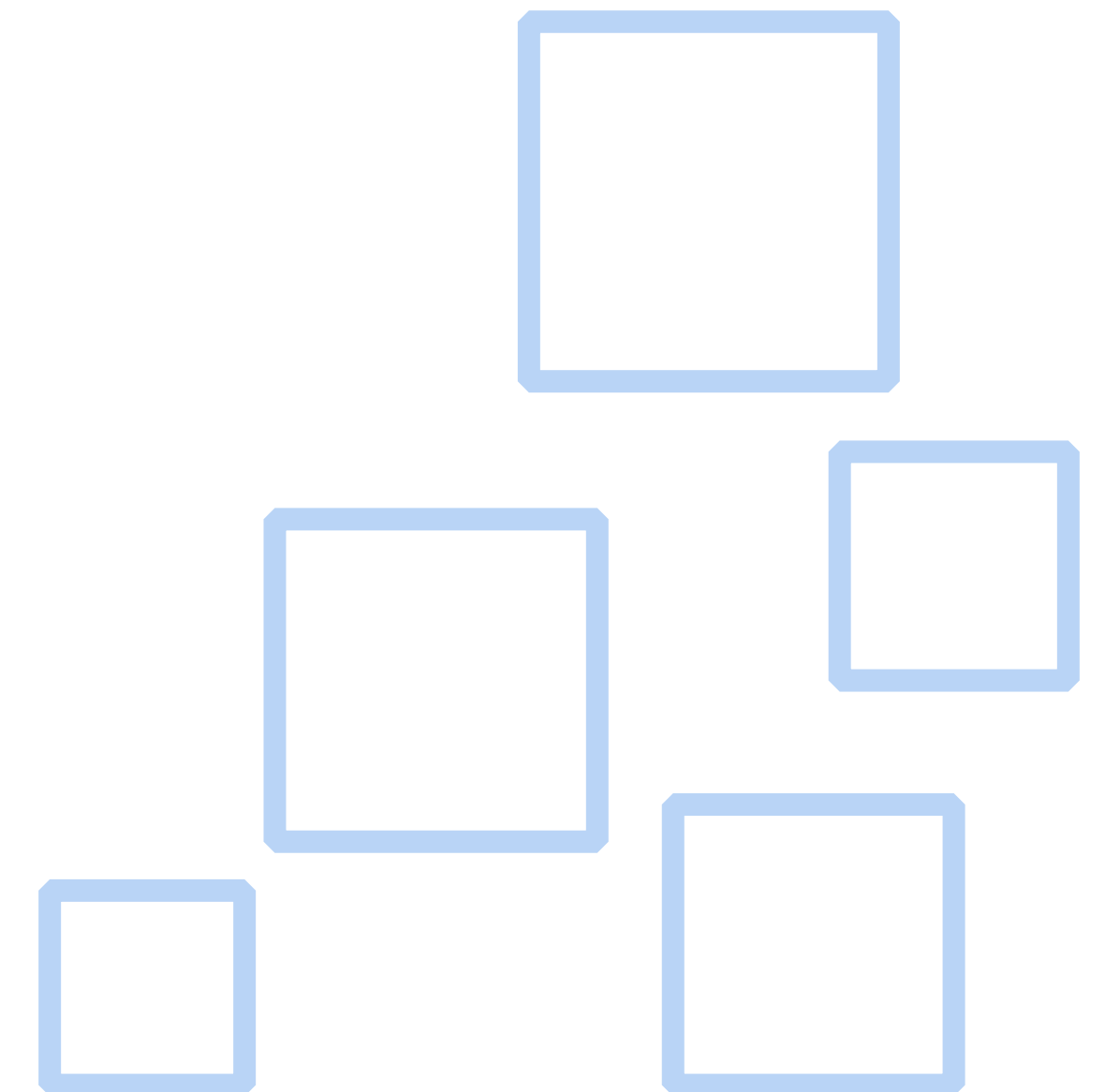
Learning Objective(s)

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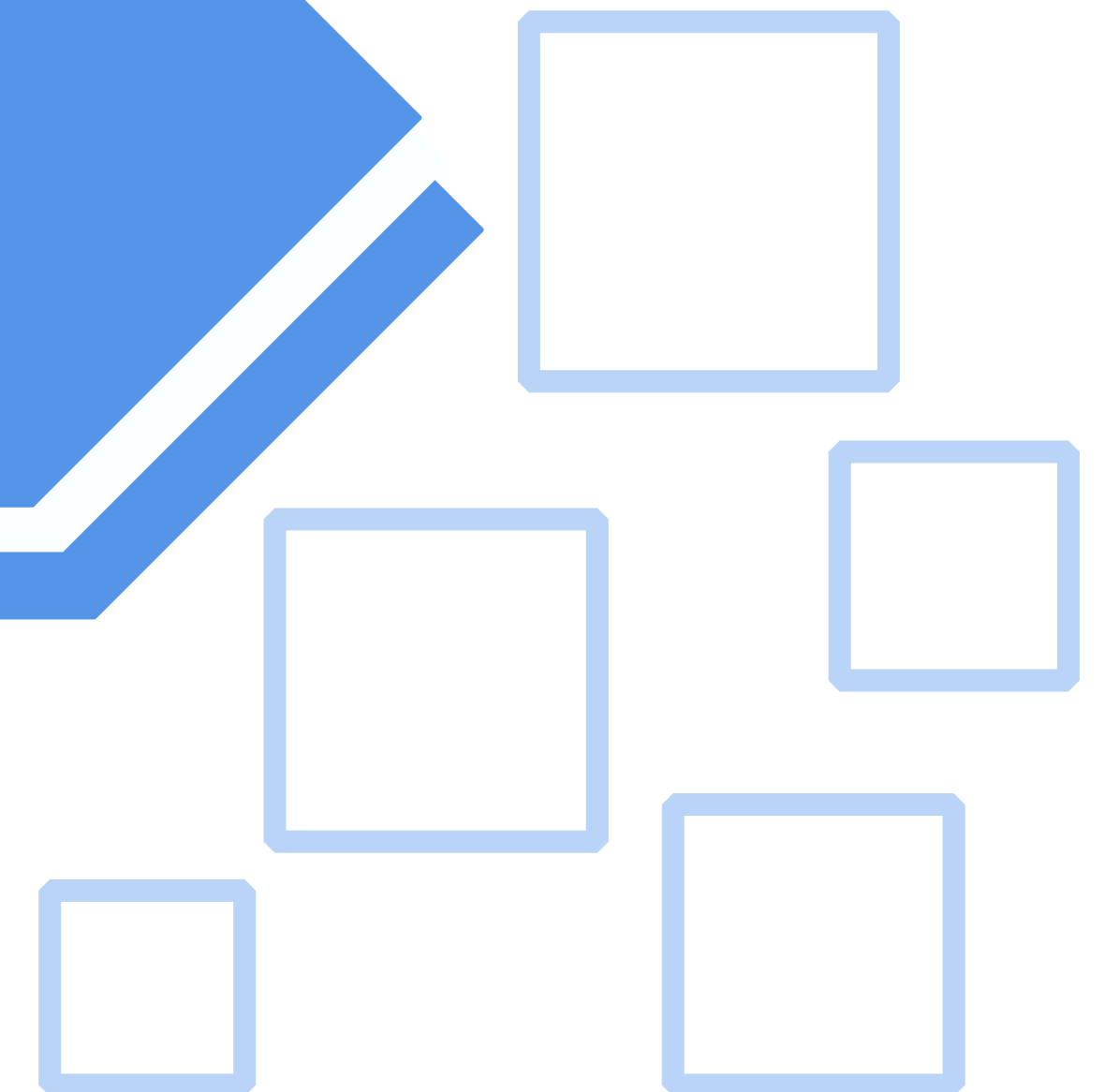
This material should address the following question(s).

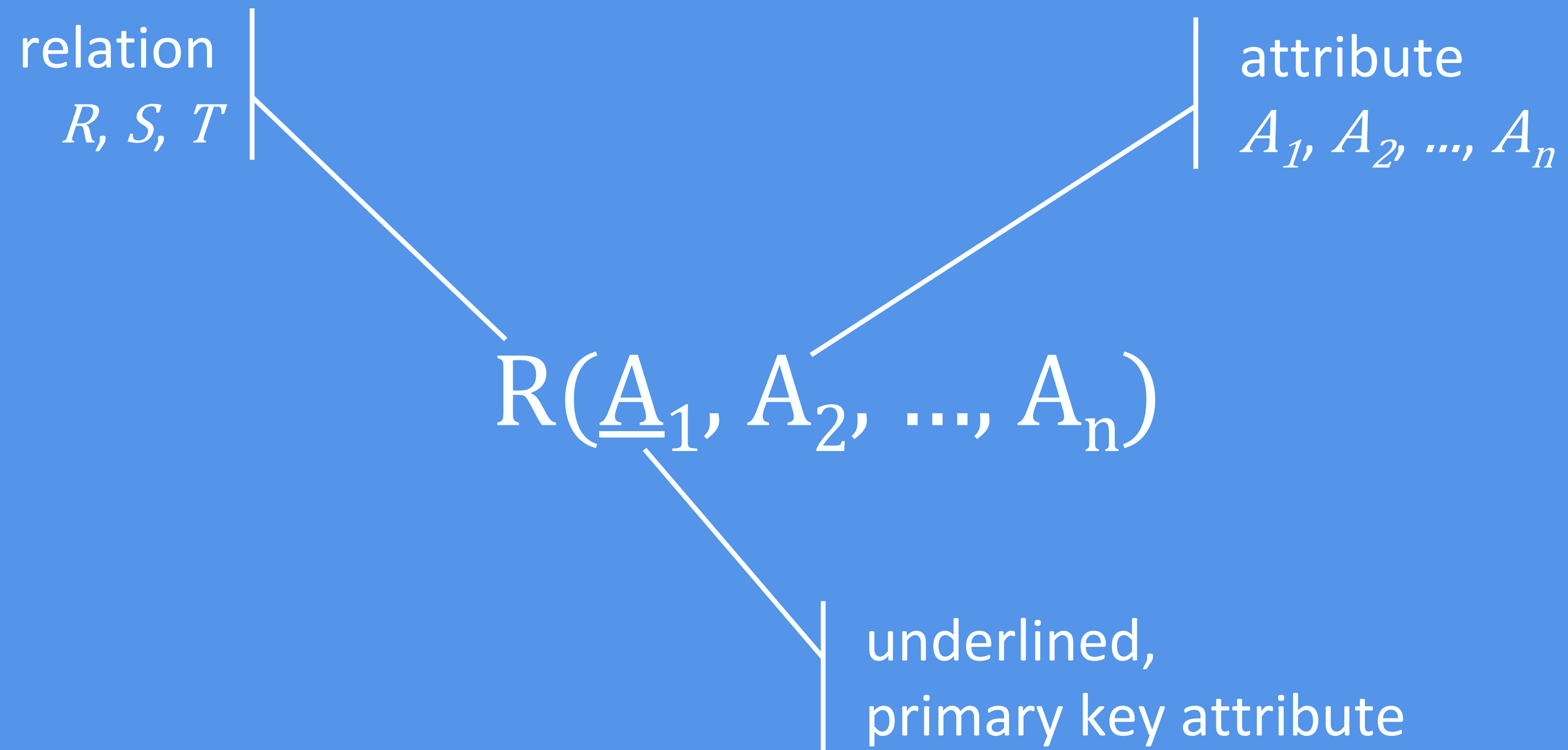
- ❓ How to represent a relation?



Representing relations

To represent a relation, we use *relation schema*.





books

PropertiesDataER Diagram

database.sqliteTablesbooks

books

Enter a SQL expression to filter results (use Ctrl+Space)

GridTextRecord

	isbn_13	title	authors	publisher	published_year	edition	
1	978-0078022159	Database System Concepts	A. Silberschatz, H. F. Korth	McGraw-Hill	2019	7	
2	978-0262032933	Introduction to Algorithms	Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest	The MIT Press	2001	2	
3	978-0078022128	Software Engineering: A Practitioner's Approach	Roger S. Pressman, Bruce G. W. Panko	McGraw Hill	2014	8	
4	978-1292096131	Software Engineering	Ian Sommerville	Courier Westford	2016	10	
5	978-0470889206	Operating System Concepts	A. Silberschatz, P.B. Galvin	John Wiley and Sons	2013	9	
6	978-1945051753	SQL QuickStart Guide: The Simplified Approach	Walter Shields	ClydeBank Media	2019	1	
7	978-9380931913	Data Mining: Concepts and Techniques	Jiawei Han, Micheline Kamber	Morgan Kaufmann	2011	3	
8	978-1736049129	Machine Learning System Design	Alex Xu, Ali Aminian	ByeByteGo	2023	1	
9	978-1491910771	Head First Java: A Brain-Friendly Guide	Trisha Gee, Bert Bates, Kathy S. O'Reilly	O'Reilly Media	2022	3	
10	978-1839214189	Data Engineering with Python: A Practical Guide	Paul Crickard	Packt Publishing	2020	1	

RefreshSaveCancel

Export data

20010

10 row(s) fetched - 1ms (1ms fetch), on 2023-09-24 at 06:04:07

books (isbn_13, title, authors, ..., edition)

Whenever **possible**,
mention the type.

$R(\underline{A}_1: \textit{type}, A_2: \textit{type}, \dots, A_n: \textit{type})$

data type is added

books ×

Properties Data ER Diagram database.sqlite Tables books

books Enter a SQL expression to filter results (use Ctrl+Space)

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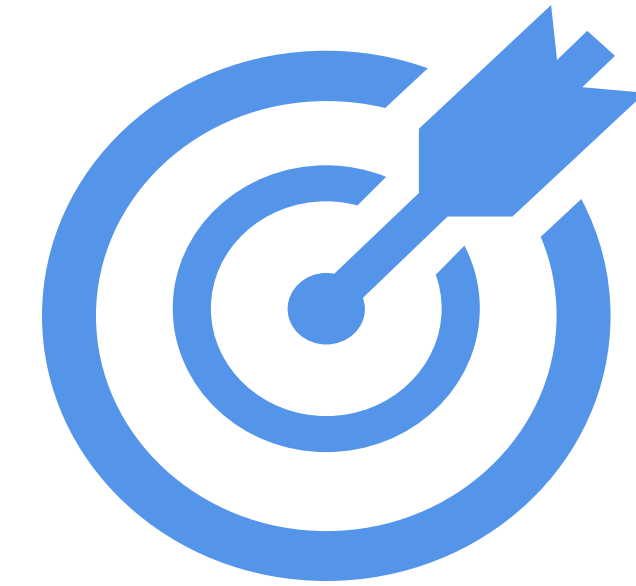
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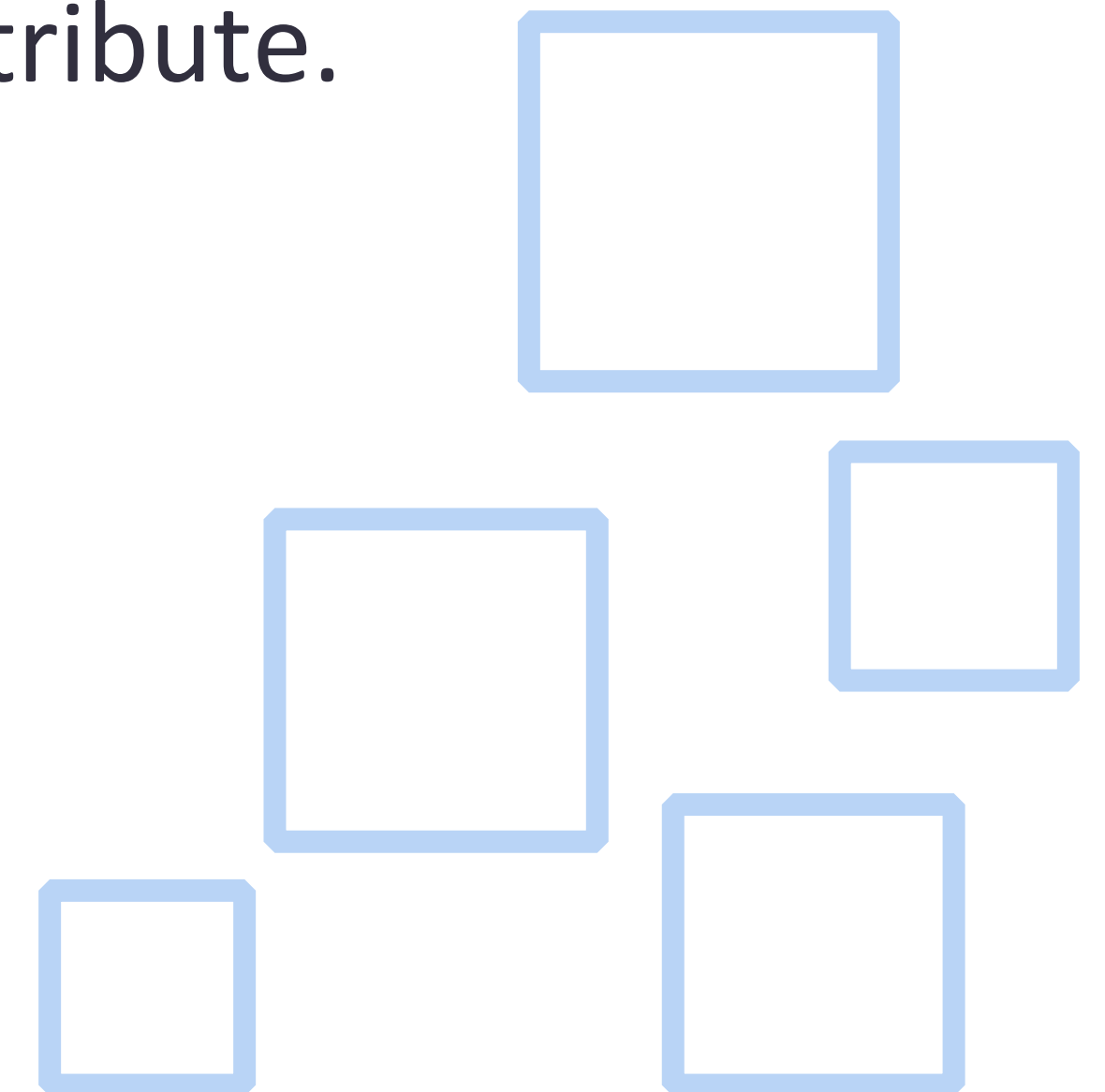
books (isbn_13:text, title:text, authors:text, ..., edition:integer)

Conclusion

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- ✓ Relation schema is used to represent a relation.
- ✓ For clarity, it is encouraged to put the type of each of the attribute.

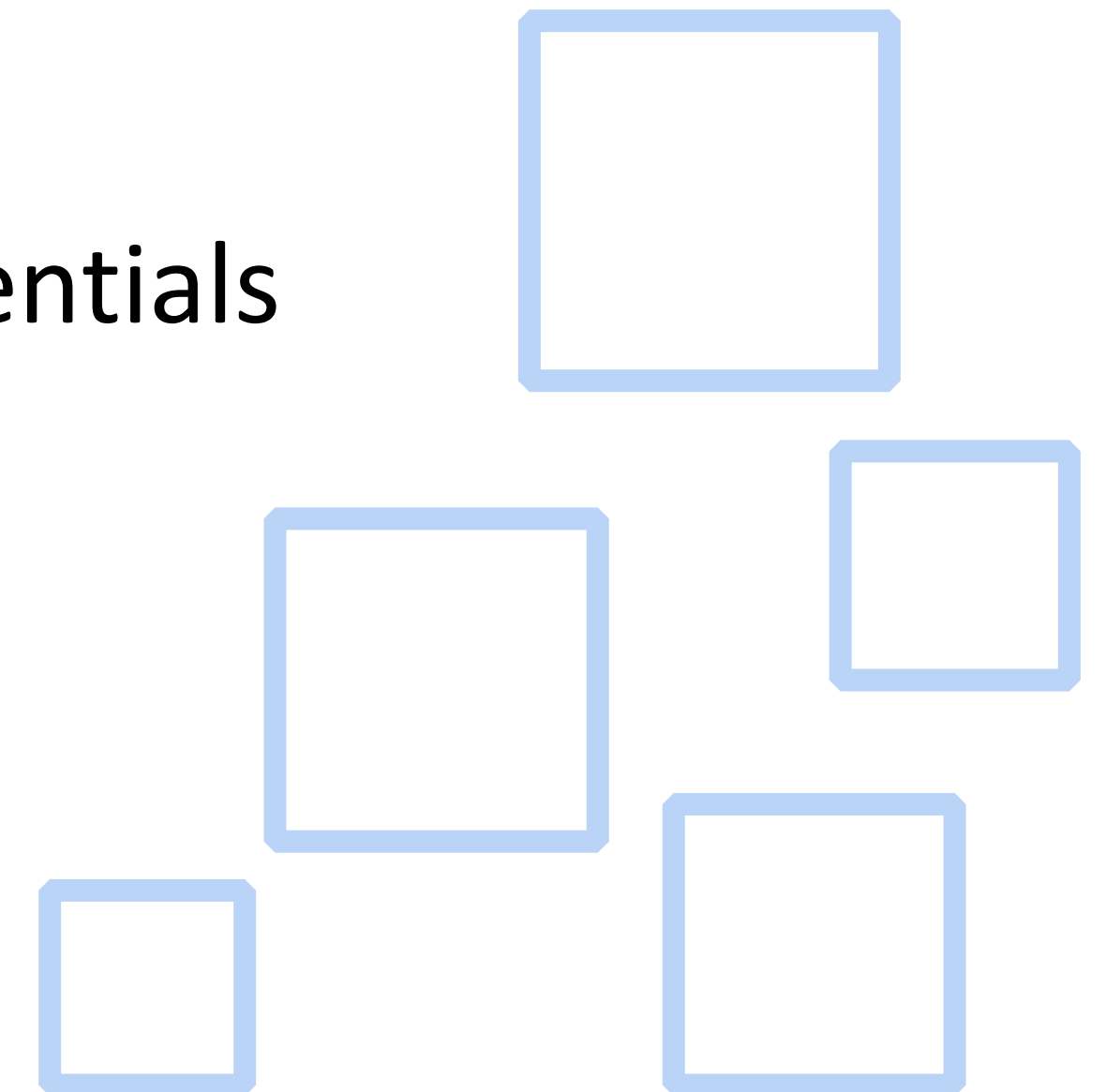


References

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- R, Elmasri, et. al., Fundamentals of Database Systems.
- A. Silberschatz, et. al., Database System Concepts.
- R. K. Rainer, et. al., Introduction to Information Systems.
- G. M. Marakas et. al., Introduction to Information Systems: Essentials for The e-Business Enterprise.

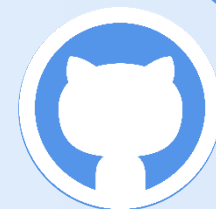


Course



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