

1.Create employee table:

Employee_id	First_name	Last_name	Salary	Hire_Date
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2.Insert 15 records:

	Employee_id	First_name	Last_name	Salary	Hire_Date	Department
▶	1	Arjun	Reddy	55000.00	2021-01-15	Sales
	2	Priya	Sharma	62000.50	2020-03-12	Marketing
	3	Rahul	Mehta	48000.00	2019-07-08	Finance
	4	Sneha	Patil	70000.00	2022-11-01	HR
	5	Vikram	Singh	53000.75	2021-06-22	IT
	6	Anjali	Nair	51000.00	2023-02-19	Operations
	7	Ravi	Kumar	47000.25	2020-10-10	Sales
	8	Divya	Joshi	60000.00	2021-09-15	Marketing
	9	Manoj	Verma	52000.00	2022-04-17	IT
	10	Pooja	Rao	58000.00	2023-01-05	Finance
	11	Karan	Malhotra	64000.00	2022-08-30	HR
	12	Neha	Dixit	55000.00	2019-12-20	Operations
	13	Suresh	Mishra	49000.00	2021-03-27	Sales
	14	Meera	Pillai	59000.00	2020-05-14	Marketing
	15	Amit	Ransal	61000.00	2023-04-10	IT

3.Aggregate Queries:

Calculate the **total salary** of employees earning more than 60,000

	total_salary
▶	257000.50

Determine the **average salary** of all employees :

	Average_Salary
▶	56266.766667

Count how many employees have a **salary less than 55,000**

	count_salary
▶	6

Identify the **highest salary** among all employees.

	highest_salary
▶	70000.00

lowest salary among all employees

	lowest_salary
▶	47000.25

total salary of employees in the **HR department**.

	total_salary_hr
▶	134000.00

average salary of employees in the **Engineering department**.

	avg_salary_eng
▶	68500.000000

Count employees earning **between 50,000 and 70,000**

	count_salary_50000_to_70000
▶	15

sum of salaries for employees earning less than 60,000.

	sum_salary_under_60000
▶	268000.00

average salary of employees earning more than 60,000.

	avg_salary_over_60000
▶	69333.333333

SQL : BETWEEN, ALIAS, LIKE, AND LIMIT

4. Create a table named Books with columns :

	employee_id	First_name	Last_name	department	salary	hire_data
▶	1	Alice	Smith	Engineering	75000	2018-03-01
	2	Bob	Jones	HR	58000	2019-07-15
	3	Charlie	Brown	Engineering	62000	2020-01-10
	4	David	Wilson	Sales	49000	2017-05-21
	5	Eva	Taylor	HR	54000	2021-11-30
	6	Frank	Anderson	Engineering	88000	2016-09-05
	7	Grace	Thomas	Marketing	45000	2022-02-14
	8	Hannah	Jackson	Sales	67000	2015-08-08
	9	Ian	White	Engineering	59000	2019-12-23
	10	Jane	Harris	HR	61000	2020-06-18
	11	Kyle	Martin	Marketing	53000	2018-10-09
	12	Lara	Thompson	Engineering	72000	2017-01-27
	13	Mike	Garcia	Sales	48000	2021-04-11
	14	Nina	Martinez	HR	55000	2022-07-06
	15	Oscar	Robinson	Marketing	66000	2019-02-28

total salary of employees earning more than 60,000

	total_salary_over_60000
▶	491000

average salary of all employees

	avg_salary_all
▶	60800.0000

employees have a salary less than 55,000

	count_salary_under_55000
▶	5

highest salary among all employees

	highest_salary
▶	88000

lowest salary among all employees

	lowest_salary
▶	45000

total salary of employees in the HR department

	total_salary_hr
▶	228000

average salary of employees in the Engineering department

	average_salary_Engineering
▶	71200.0000

employees earn more than 50,000 but less than 70,000

	count_salary_50000_to_70000
▶	9

sum of salaries for employees earning less than 60,000

	total_salary_under_60000
▶	421000

average salary of employees earning above 60,000

	total_salary_over_60000
▶	70142.8571

books published between 1900 and 1950.

	book_id	title	author	genre	published_year	available_copies
▶	2	1984	George Orwell	Dystopian	1949	5
	4	The Hobbit	J.R.R. Tolkien	Fantasy	1937	6
	5	The Great Gatsby	F. Scott Fitzgerald	Fiction	1925	2
	9	Brave New World	Aldous Huxley	Dystopian	1932	3

books that have between 4 and 7 available copies.

	book_id	title	author	genre	published_year	available_copies
▶	1	To Kill a Mockingbird	Harper Lee	Fiction	1960	4
	2	1984	George Orwell	Dystopian	1949	5
	3	Pride and Prejudice	Jane Austen	Romance	1813	7
	4	The Hobbit	J.R.R. Tolkien	Fantasy	1937	6
	8	The Catcher in the Rye	J.D. Salinger	Fiction	1951	4
	10	The Alchemist	Paulo Coelho	Philosophical	1988	5
	12	Jane Eyre	Charlotte Brontë	Romance	1847	6
	14	Frankenstein	Mary Shelley	Horror	1818	4

books published between 1800 and 1900.

	book_id	title	author	genre	published_year	available_copies
▶	3	Pride and Prejudice	Jane Austen	Romance	1813	7
	6	Moby Dick	Herman Melville	Adventure	1851	3
	7	War and Peace	Leo Tolstoy	Historical	1869	1
	12	Jane Eyre	Charlotte Brontë	Romance	1847	6
	13	The Odyssey	Homer	Epic	1800	2
	14	Frankenstein	Mary Shelley	Horror	1818	4

Show the books with IDs between 5 and 10

	book_id	title	author	genre	published_year	available_copies
▶	5	The Great Gatsby	F. Scott Fitzgerald	Fiction	1925	2
	6	Moby Dick	Herman Melville	Adventure	1851	3
	7	War and Peace	Leo Tolstoy	Historical	1869	1
	8	The Catcher in the Rye	J.D. Salinger	Fiction	1951	4
	9	Brave New World	Aldous Huxley	Dystopian	1932	3
	10	The Alchemist	Paulo Coelho	Philosophical	1988	5

books whose published year is between 1850 and 1950 and have 5 or more copies available.

	book_id	title	author	genre	published_year	available_copies
▶	3	Pride and Prejudice	Jane Austen	Romance	1813	7
	12	Jane Eyre	Charlotte Brontë	Romance	1847	6

books whose titles start with “The”

	title
▶	The Hobbit
	The Great Gatsby
	The Catcher in the Rye
	The Alchemist
	The Lord of the Rings
	The Odyssey
	The Road

books whose author’s name contains “Tolkien”.

	book_id	title	author	genre	published_year	available_copies
▶	4	The Hobbit	J.R.R. Tolkien	Fantasy	1937	6
	11	The Lord of the Rings	J.R.R. Tolkien	Fantasy	1954	2

books whose genre contains the word “Fiction”

	book_id	title	author	genre	published_year	available_copies
▶	1	To Kill a Mockingbird	Harper Lee	Fiction	1960	4
	5	The Great Gatsby	F. Scott Fitzgerald	Fiction	1925	2
	8	The Catcher in the Rye	J.D. Salinger	Fiction	1951	4

books that have “War” in the title

	book_id	title	author	genre	published_year	available_copies
▶	7	War and Peace	Leo Tolstoy	Historical	1869	1

books where the author’s name ends with “Tolstoy”

	book_id	title	author	genre	published_year	available_copies
▶	7	War and Peace	Leo Tolstoy	Historical	1869	1

book titles and their available copies, using aliases for the columns

	book_title	copies
▶	To Kill a Mockingbird	4
	1984	5
	Pride and Prejudice	7
	The Hobbit	6
	The Great Gatsby	2
	Moby Dick	3
	War and Peace	1
	The Catcher in the Rye	4
	Brave New World	3
	The Alchemist	5
	The Lord of the Rings	2
	Jane Eyre	6
	The Odyssey	2
	Frankenstein	4

Create an alias for the table Books as B and find all books with more than 5 available copies.

	book_id	title	author	genre	published_year	available_copies
▶	3	Pride and Prejudice	Jane Austen	Romance	1813	7
	4	The Hobbit	J.R.R. Tolkien	Fantasy	1937	6
	12	Jane Eyre	Charlotte Brontë	Romance	1847	6

rename the Published_Year column as Year_Published and display the book title and author.

	title	author	year_published
►	To Kill a Mockingbird	Harper Lee	1960
	1984	George Orwell	1949
	Pride and Prejudice	Jane Austen	1813
	The Hobbit	J.R.R. Tolkien	1937
	The Great Gatsby	F. Scott Fitzgerald	1925
	Moby Dick	Herman Melville	1851
	War and Peace	Leo Tolstoy	1869
	The Catcher in the Rye	J.D. Salinger	1951
	Brave New World	Aldous Huxley	1932
	The Alchemist	Paulo Coelho	1988
	The Lord of the Rings	J.R.R. Tolkien	1954
	Jane Eyre	Charlotte Brontë	1847
	The Odyssey	Homer	1800
	Frankenstein	Mary Shelley	1818
	The Road	Cormac McCarthy	2006

book's title, author, and the number of available copies with aliases for all columns.

	book_title	book_author	copies
►	To Kill a Mockingbird	Harper Lee	4
	1984	George Orwell	5
	Pride and Prejudice	Jane Austen	7
	The Hobbit	J.R.R. Tolkien	6
	The Great Gatsby	F. Scott Fitzgerald	2
	Moby Dick	Herman Melville	3
	War and Peace	Leo Tolstoy	1
	The Catcher in the Rye	J.D. Salinger	4
	Brave New World	Aldous Huxley	3
	The Alchemist	Paulo Coelho	5
	The Lord of the Rings	J.R.R. Tolkien	2
	Jane Eyre	Charlotte Brontë	6
	The Odyssey	Homer	2
	Frankenstein	Mary Shelley	4
	The Road	Cormac McCarthy	3

Available_Copies column to display it as “Stock” and filter books where “Stock” is greater than 4

	title	author	stock
►	1984	George Orwell	5
	Pride and Prejudice	Jane Austen	7
	The Hobbit	J.R.R. Tolkien	6
	The Alchemist	Paulo Coelho	5
	Jane Eyre	Charlotte Brontë	6

first 5 books from the list.

	book_id	title	author	genre	published_year	available_copies
▶	1	To Kill a Mockingbird	Harper Lee	Fiction	1960	4
	2	1984	George Orwell	Dystopian	1949	5
	3	Pride and Prejudice	Jane Austen	Romance	1813	7
	4	The Hobbit	J.R.R. Tolkien	Fantasy	1937	6
	5	The Great Gatsby	F. Scott Fitzgerald	Fiction	1925	2

top 3 most recently published books

	book_id	title	author	genre	published_year	available_copies
▶	15	The Road	Cormac McCarthy	Post-Apocalyptic	2006	3
	10	The Alchemist	Paulo Coelho	Philosophical	1988	5
	1	To Kill a Mockingbird	Harper Lee	Fiction	1960	4

output to 7 books with available copies greater than 3

	book_id	title	author	genre	published_year	available_copies
▶	1	To Kill a Mockingbird	Harper Lee	Fiction	1960	4
	2	1984	George Orwell	Dystopian	1949	5
	3	Pride and Prejudice	Jane Austen	Romance	1813	7
	4	The Hobbit	J.R.R. Tolkien	Fantasy	1937	6
	8	The Catcher in the Rye	J.D. Salinger	Fiction	1951	4
	10	The Alchemist	Paulo Coelho	Philosophical	1988	5
	12	Jane Eyre	Charlotte Brontë	Romance	1847	6

first 10 books ordered by author name

	book_id	title	author	genre	published_year	available_copies
▶	9	Brave New World	Aldous Huxley	Dystopian	1932	3
	12	Jane Eyre	Charlotte Brontë	Romance	1847	6
	15	The Road	Cormac McCarthy	Post-Apocalyptic	2006	3
	5	The Great Gatsby	F. Scott Fitzgerald	Fiction	1925	2
	2	1984	George Orwell	Dystopian	1949	5
	1	To Kill a Mockingbird	Harper Lee	Fiction	1960	4
	6	Moby Dick	Herman Melville	Adventure	1851	3
	13	The Odyssey	Homer	Epic	1800	2
	8	The Catcher in the Rye	J.D. Salinger	Fiction	1951	4
	4	The Hobbit	J.R.R. Tolkien	Fantasy	1937	6

first 4 books from the "Fantasy" genre

	book_id	title	author	genre	published_year	available_copies
▶	4	The Hobbit	J.R.R. Tolkien	Fantasy	1937	6
	11	The Lord of the Rings	J.R.R. Tolkien	Fantasy	1954	2

