

```
-- 1) Print all the titles names
```

```
select title from titles
```

```
-- 2) Print all the titles that have been published by 1389
```

```
select * from titles where pub_id = 1389
```

```
-- 3) Print the books that have price in range of 10 to 15
```

110 %

Results Messages

	title
1	But Is It User Friendly?
2	Computer Phobic AND Non-Phobic Individuals: Beha...
3	Cooking with Computers: Surreptitious Balance She...
4	Emotional Security: A New Algorithm
5	Fifty Years in Buckingham Palace Kitchens
6	Is Anger the Enemy?
7	Life Without Fear
8	Net Etiquette
9	Onions, Leeks, and Garlic: Cooking Secrets of the M...
10	Prolonged Data Deprivation: Four Case Studies
11	Secrets of Silicon Valley
12	Silicon Valley Gastronomic Treats
13	Straight Talk About Computers

```
-- 2) Print all the titles that have been published by 1389
```

```
select * from titles where pub_id = 1389
```

```
-- 3) Print the books that have price in range of 10 to 15
```

110 %

Results Messages

	title_id	title	type	pub_id	price	advance	royalty	ytd_sales	notes
1	BU1032	The Busy Executive's Database Guide	business	1389	19.99	5000.00	10	4095	An overview of available database systems with e...
2	BU1111	Cooking with Computers: Surreptitious Balance Sh...	business	1389	11.95	5000.00	10	3876	Helpful hints on how to use your electronic resourc...
3	BU7832	Straight Talk About Computers	business	1389	19.99	5000.00	10	4095	Annotated analysis of what computers can do for y...
4	PC1035	But Is It User Friendly?	popular_comp	1389	22.95	7000.00	16	8780	A survey of software for the naive user, focusing o...
5	PC8888	Secrets of Silicon Valley	popular_comp	1389	20.00	8000.00	10	4095	Muckraking reporting on the world's largest compu...
6	PC9999	Net Etiquette	popular_comp	1389	NULL	NULL	NULL	NULL	A must-read for computer conferencing.

```
-- 3) Print the books that have price in range of 10 to 15
```

```
select title, price from titles where price between 10 and 15
```

```
-- 4) Print those books that have no price
```

110 %

Results Messages

	title	price
1	Cooking with Computers: Surreptitious Balance Sh...	11.95
2	Is Anger the Enemy?	10.95
3	Fifty Years in Buckingham Palace Kitchens	11.95
4	Sushi, Anyone?	14.99

```
-- 4) Print those books that have no price
```

```
select title, price from titles where price is null
```

110 %

Results Messages

	title	price
1	The Psychology of Computer Cooking	NULL
2	Net Etiquette	NULL

```
-- 5) Print the book names that start with 'The'
```

```
select title from titles where title like 'The%'
```

110 %

Results Messages

	title
1	The Busy Executive's Database Guide
2	The Gourmet Microwave
3	The Psychology of Computer Cooking

-- 6) Print the book names that do not have 'v' in their name

```
select title from titles where title NOT LIKE '%v%';
```

Results	
Messages	
title	
1	But Is It User Friendly?
2	Cooking with Computers: Surreptitious Balance Sh...
3	Emotional Security: A New Algorithm
4	Fifty Years in Buckingham Palace Kitchens
5	Is Anger the Enemy?
6	Life Without Fear
7	Net Etiquette
8	Onions, Leeks, and Garlic: Cooking Secrets of the ...
9	Straight Talk About Computers
10	Sushi, Anyone?
11	The Psychology of Computer Cooking
12	You Can Combat Computer Stress!

-- 7) print the books sorted by the royalty

```
select * from titles
where royalty is not null
order by royalty;
```

110 %

Results Messages

	title_id	title	type	pub_id	price	advance	royalty	ytd_sales	notes	pubdate
1	BU1032	The Busy Executive's Database Guide	business	1389	19.99	5000.00	10	4095	An overview of available database systems with emp...	1991-06
2	BU1111	Cooking with Computers: Surreptitious Balance She...	business	1389	11.95	5000.00	10	3876	Helpful hints on how to use your electronic resource...	1991-06
3	BU7832	Straight Talk About Computers	business	1389	19.99	5000.00	10	4095	Annotated analysis of what computers can do for yo...	1991-06
4	PS2106	Life Without Fear	psychology	0736	7.00	6000.00	10	111	New exercise, meditation, and nutritional techniques...	1991-10
5	PS3333	Prolonged Data Deprivation: Four Case Studies	psychology	0736	19.99	2000.00	10	4072	What happens when the data runs dry? Searching ...	1991-06
6	PS7777	Emotional Security: A New Algorithm	psychology	0736	7.99	4000.00	10	3336	Protecting yourself and your loved ones from undue ...	1991-06
7	TC3218	Onions, Leeks, and Garlic: Cooking Secrets of the M...	trad_cook	0877	20.95	7000.00	10	375	Profusely illustrated in color, this makes a wonderful ...	1991-10
8	PC8888	Secrets of Silicon Valley	popular_comp	1389	20.00	8000.00	10	4095	Muckraking reporting on the world's largest compute...	1994-06
9	PS1372	Computer Phobic AND Non-Phobic Individuals: Beh...	psychology	0877	21.59	7000.00	10	375	A must for the specialist, this book examines the diff...	1991-10
10	TC7777	Sushi, Anyone?	trad_cook	0877	14.99	8000.00	10	4095	Detailed instructions on how to make authentic Jap...	1991-06
11	PS2091	Is Anger the Enemy?	psychology	0736	10.95	2275.00	12	2045	Carefully researched study of the effects of strong e...	1991-06
12	MC2222	Silicon Valley Gastronomic Treats	mod_cook	0877	19.99	0.00	12	2032	Favorite recipes for quick, easy, and elegant meals.	1991-06

-- 8) print the books sorted by publisher in descending then by types in ascending then by price in descending

```
select * from titles
order by pub_id desc , type , price desc
```

10 %

ResultsMessages

	title_id	title	type	pub_id	price	advance	royalty	ytd_sales	notes	pubdate
1	BU7832	Straight Talk About Computers	business	1389	19.99	5000.00	10	4095	Annotated analysis of what computers can do for y...	1991-06
2	BU1032	The Busy Executive's Database Guide	business	1389	19.99	5000.00	10	4095	An overview of available database systems with em...	1991-06
3	BU1111	Cooking with Computers: Surreptitious Balance She...	business	1389	11.95	5000.00	10	3876	Helpful hints on how to use your electronic resourc...	1991-06
4	PC1035	But Is It User Friendly?	popular_comp	1389	22.95	7000.00	16	8780	A survey of software for the naive user, focusing on...	1991-06
5	PC8888	Secrets of Silicon Valley	popular_comp	1389	20.00	8000.00	10	4095	Muckraking reporting on the world's largest comput...	1994-06
6	PC9999	Net Etiquette	popular_comp	1389	NULL	NULL	NULL	NULL	A must-read for computer conferencing.	2024-05
7	MC2222	Silicon Valley Gastronomic Treats	mod_cook	0877	19.99	0.00	12	2032	Favorite recipes for quick, easy, and elegant meals.	1991-06
8	MC3021	The Gourmet Microwave	mod_cook	0877	2.99	15000.00	24	22246	Traditional French gourmet recipes adapted for mo...	1991-06
9	PS1372	Computer Phobic AND Non-Phobic Individuals: Beh...	psychology	0877	21.59	7000.00	10	375	A must for the specialist, this book examines the dif...	1991-10
10	TC3218	Onions, Leeks, and Garlic: Cooking Secrets of the M...	trad_cook	0877	20.95	7000.00	10	375	Profusely illustrated in color, this makes a wonderf...	1991-10
11	TC7777	Sushi, Anyone?	trad_cook	0877	14.99	8000.00	10	4095	Detailed instructions on how to make authentic Jap...	1991-06
12	TC4203	Fifty Years in Buckingham Palace Kitchens	trad_cook	0877	11.95	4000.00	14	15096	More anecdotes from the Queen's favorite cook de...	1991-06
13	MC3026	The Psychology of Computer Cooking	UNDECIDED	0877	NULL	NULL	NULL	NULL		2024-05
14	BU2075	You Can Combat Computer Stress!	business	0736	2.99	10125.00	24	18722	The latest medical and psychological techniques for...	1991-06
15	PS3333	Prolonged Data Deprivation: Four Case Studies	psychology	0736	19.99	2000.00	10	4072	What happens when the data runs dry? Searching ...	1991-06
16	PS2091	Is Anger the Enemy?	psychology	0736	10.95	2275.00	12	2045	Carefully researched study of the effects of strong ...	1991-06

```
-- 9) Print the average price of books in every type
```

```
select type, AVG(price) 'Average price by type' from titles group by type;
```

```
-- 10) print all the types in uniques
```

110 %

	type	Average price by type
1	business	13.73
2	mod_cook	11.49
3	popular_comp	21.475
4	psychology	13.504
5	trad_cook	15.9633
6	UNDECIDED	NULL

```
select type, AVG(price) 'Average price by type' from titles group by type;
```

```
-- 10) print all the types in uniques
```

```
select distinct type from titles;
```

110 %

	type
1	business
2	mod_cook
3	popular_comp
4	psychology
5	trad_cook
6	UNDECIDED

```
-- 11) Print the first 2 costliest books
```

```
select top 2 * from titles  
where price is not null  
order by price
```

110 %

	title_id	title	type	pub_id	price	advance	royalty	ytd_sales	notes	pubdate
1	BU2075	You Can Combat Computer Stress!	business	0736	2.99	10125.00	24	18722	The latest medical and psychological techniques f...	1991-06-30 00:00:00.000
2	MC3021	The Gourmet Microwave	mod_cook	0877	2.99	15000.00	24	22246	Traditional French gourmet recipes adapted for m...	1991-06-18 00:00:00.000

```
select * from titles
where type = 'business' and price < 20 and advance > 7000
```

110 %

Results Messages

	title_id	title	type	pub_id	price	advance	royalty	ytd_sales	notes	pubdate
1	BU2075	You Can Combat Computer Stress!	business	0736	2.99	10125.00	24	18722	The latest medical and psychological techniques ...	1991-06-30 00:00:00.000

```
-- 14) Print the Authors who are from 'CA'
select * from authors where state = 'CA'
```

```
-- 15) Print the count of authors from every state
```

110 %

Results Messages

	au_id	au_lname	au_fname	phone	address	city	state	zip	contract
1	172-32-1176	White	Johnson	408 496-7223	10932 Bigge Rd.	Menlo Park	CA	94025	1
2	213-46-8915	Green	Marjorie	415 986-7020	309 63rd St. #411	Oakland	CA	94618	1
3	238-95-7766	Carson	Cheryl	415 548-7723	589 Darwin Ln.	Berkeley	CA	94705	1
4	267-41-2394	O'Leary	Michael	408 286-2428	22 Cleveland Av. #14	San Jose	CA	95128	1
5	274-80-9391	Straight	Dean	415 834-2919	5420 College Av.	Oakland	CA	94609	1
6	409-56-7008	Bennet	Abraham	415 658-9932	6223 Bateman St.	Berkeley	CA	94705	1
7	427-17-2319	Dull	Ann	415 836-7128	3410 Blonde St.	Palo Alto	CA	94301	1
8	472-27-2349	Gringlesby	Burt	707 938-6445	PO Box 792	Covelo	CA	95428	1
9	486-29-1786	Locksley	Charlene	415 585-4620	18 Broadway Av.	San Francisco	CA	94130	1
10	672-71-3249	Yokomoto	Akiko	415 935-4228	3 Silver Ct.	Walnut Creek	CA	94595	1
11	724-08-9931	Stringer	Dirk	415 843-2991	5420 Telegraph Av.	Oakland	CA	94609	0
12	724-80-9391	MacFeather	Stearns	415 354-7128	44 Upland Hts.	Oakland	CA	94612	1
13	756-30-7391	Karsen	Livia	415 534-9219	5720 McAuley St.	Oakland	CA	94609	1
14	846-92-7186	Hunter	Sheryl	415 836-7128	3410 Blonde St.	Palo Alto	CA	94301	1
15	893-72-1158	McBadden	Heather	707 448-4982	301 Putnam	Vacaville	CA	95688	0

```
-- 15) Print the count of authors from every state
```

```
select state, count(au_id) from authors group by state
```

110 %

Results Messages

	state	(No column name)
1	CA	15
2	IN	1
3	KS	1
4	MD	1
5	MI	1
6	OR	1
7	TN	1
8	UT	2

PostgreSQL exercises

https://pgexercises.com/questions/basic/

Simple SQL Queries

Begin!

This category deals with the basics of SQL. It covers select and where clauses, case expressions, unions, and a few other odds and ends. If you're already educated in SQL you will probably find these exercises fairly easy. If not, you should find them a good point to start learning for the more difficult categories ahead!

If you struggle with these questions, I strongly recommend [Learning SQL](#), by Alan Beaulieu, as a concise and well-written book on the subject. If you're interested in the fundamentals of database systems (as opposed to just how to use them), you should also investigate [An Introduction to Database Systems](#) by C.J. Date.

- Retrieve everything from a table ✓
- Retrieve specific columns from a table ✓
- Control which rows are retrieved ✓
- Control which rows are retrieved - part 2 ✓
- Basic string searches ✓
- Matching against multiple possible values ✓
- Classify results into buckets
- Working with dates
- Removing duplicates, and ordering results ✓
- Combining results from multiple queries ✓
- Simple aggregation ✓
- More aggregation ✓