

BASIC QUERIES

--1) retrieve all the books in 'fiction' genre:

	book_id [PK] integer	title character varying (100)	author character varying (100)	genre character varying (50)	published_year integer	price numeric (10,2)	stock integer
1	4	Customizable 24-hour product	Christopher Andrews	Fiction	2020	43.52	8
2	22	Multi-layered optimizing migration	Wesley Escobar	Fiction	1908	39.23	78
3	28	Expanded analyzing portal	Lise Coffey	Fiction	1941	37.51	79
4	29	Quality-focused multi-tasking challenge	Katrina Underwood	Fiction	1905	31.12	100
5	31	Implemented encompassing conglomeration	Melissa Taylor	Fiction	2010	21.23	44
6	39	Optimized national process improvement	Megan Goodwin	Fiction	1978	10.99	42
7	40	Adaptive didactic interface	Natalie Gonzalez	Fiction	1923	25.97	94
8	47	Reverse-engineered directional conglomera...	John Christian	Fiction	2006	20.37	90
9	52	Re-contextualized real-time strategy	Nicole Lynch	Fiction	1952	26.34	23
10	53	Polarized heuristic database	Franklin Mack	Fiction	1989	22.38	56
11	100	Synchronized client-server service-desk	James Alvarado	Fiction	1906	49.89	29
12	116	Multi-tiered foreground contingency	Jamie Gates	Fiction	1938	41.82	50
13	125	Public-key analyzing Graphic Interface	Abigail Madden	Fiction	1990	32.41	16
14	130	Realigned context-sensitive pricing structu...	Jason Rodriguez	Fiction	2004	6.64	90
15	134	Polarized bandwidth-monitored throughput	Linda Newman	Fiction	1955	35.72	49
16	142	Multi-tiered responsive parallelism	Amanda Wilson	Fiction	1940	48.96	11
17	143	Networked multimedia support	Nancy Goodman	Fiction	2012	43.65	50
18	144	Future-proofed callable software	Matthew Wolf	Fiction	1945	19.27	90
19	156	Synergistic grid-enabled website	Brandon Black	Fiction	1953	31.68	34
20	173	Ergonomic foreground Graphic Interface	Patrick Williams	Fiction	1948	6.07	100
21	185	Networked object-oriented definition	Kelly Vazquez	Fiction	1940	21.98	10
22	187	Total well-modalized groupware	Kenneth Phillips	Fiction	1989	22.98	7

--2) find books published after the year 1950:

	book_id [PK] integer	title character varying (100)	author character varying (100)	genre character varying (50)	published_year integer	price numeric (10,2)	stock integer
1	2	Persevering reciprocal knowledge user	Merio Moore	Fantasy	1971	35.80	19
2	4	Customizable 24-hour product	Christopher Andrews	Fiction	2020	43.52	8
3	5	Adaptive 5th-generation encoding	Juan Miller	Fantasy	1956	10.95	16
4	6	Advanced encompassing implementation	Bryan Morgan	Biography	1985	6.56	2
5	8	Persistent local encoding	Troy Cox	Science Fiction	2019	48.99	84
6	9	Optimized interactive challenge	Colin Buckley	Fantasy	1987	14.33	70
7	10	Ergonomic national hub	Samantha Ruiz	Mystery	2015	24.63	25
8	11	Secured zero-tolerance time-frame	Denise Barnes	Fantasy	1993	35.95	10
9	12	Polarized optimal array	Destiny Soont	Non-Fiction	1989	27.43	63
10	15	User-friendly motivating strategy	Keith Smith	Non-Fiction	1987	23.83	58
11	17	Reduced secondary core	Benjamin Peters	Fantasy	1966	5.37	45
12	18	Adaptive 4th-generation concept	Hector Palmer	Non-Fiction	2021	39.47	32
13	19	Progressive asymmetric Internet solution	Sean Miller	Science Fiction	1990	11.31	1
14	20	Face-to-face systematic throughput	Teresa Brennan	Non-Fiction	1973	48.13	64
15	23	Reverse-engineered context-sensitive hardware	Christina Hernandez	Mystery	1967	38.55	70
16	25	Devolved mobile conglomeration	Alexander Bailey	Biography	1984	8.55	79
17	26	Multi-channelled multi-tasking capability	Patricia Buick	Science Fiction	1964	21.05	41
18	30	Multi-layered global open system	Jose Meyer	Biography	2012	30.58	37
19	31	Implemented encompassing conglomeration	Melissa Taylor	Fiction	2010	21.23	44
20	32	Synergistic dedicated concept	Lise Bailey	Mystery	2021	21.56	100
21	33	Team-oriented empowering synergy	Sandra Williams	Non-Fiction	2023	35.06	49
22	35	Grass-roots solution-oriented adapter	William Turner	Non-Fiction	2018	31.81	85

--3) list all the customers from 'canada':

	customer_id [PK] integer	name character varying (100)	email character varying (100)	phone character varying (15)	city character varying (50)	country character varying (150)
1	38	Nicholas Harris	christine93@perkins.com	1234567928	Davistown	Canada
2	415	James Ramirez	robert54@hall.com	1234568305	Maxwelltown	Canada
3	468	David Hart	stokesrebecca@gmail.co...	1234568358	Thompsonfurt	Canada

--4) show all orders placed in november 2023:

	order_id [PK] integer	customer_id integer	book_id integer	order_date date	quantity integer	total_amount numeric (10,2)
1	4	433	343	2023-11-25	7	301.21
2	19	496	60	2023-11-17	9	316.26
3	75	291	375	2023-11-30	5	170.75
4	132	469	333	2023-11-22	7	194.32
5	137	474	471	2023-11-25	8	363.04
6	163	207	384	2023-11-23	3	101.76
7	182	129	293	2023-11-01	7	125.51
8	200	313	303	2023-11-23	1	6.57
9	213	325	447	2023-11-17	7	253.75
10	231	22	384	2023-11-11	1	33.92
11	245	386	97	2023-11-01	9	411.66
12	252	405	387	2023-11-15	5	237.10
13	257	123	403	2023-11-06	1	15.01
14	288	6	128	2023-11-13	1	24.04
15	307	368	133	2023-11-17	1	20.96
16	322	270	112	2023-11-08	2	16.04
17	344	385	218	2023-11-25	5	26.80
18	389	485	391	2023-11-18	2	66.84
19	414	23	234	2023-11-10	1	7.15
20	429	449	146	2023-11-01	7	101.50
21	432	420	168	2023-11-04	3	42.39
22	449	490	222	2023-11-18	1	29.59

--5) retrieve the total stock of books available:

	total_stock bigint
1	25056

--6) find the details of the most expensive book:

	book_id [PK] integer	title character varying (100)	author character varying (100)	genre character varying (50)	published_year integer	price numeric (10,2)	stock integer
1	340	Proactive system-worthy orchestral...	Robert Scott	Mystery	1907	49.98	88

--7) show all the customers who ordered more than 1 quantity of book:

	order_id [PK] integer	customer_id integer	book_id integer	order_date date	quantity integer	total_amount numeric (10,2)
1	1	84	169	2023-05-26	8	188.56
2	2	137	301	2023-01-23	10	216.60
3	3	216	261	2024-05-27	6	85.50
4	4	433	343	2023-11-25	7	301.21
5	5	14	431	2023-07-26	7	136.36
6	6	439	119	2024-10-11	5	249.40
7	7	195	467	2023-10-23	6	82.92
8	8	32	159	2024-05-07	4	144.84
9	9	109	407	2024-01-04	9	379.71
10	10	94	122	2024-07-09	4	123.00
11	12	454	3	2024-06-17	2	31.50
12	13	420	180	2023-06-08	5	125.45
13	14	454	319	2023-08-24	2	85.22
14	15	127	479	2023-01-10	6	229.62
15	16	412	196	2023-10-06	8	53.52
16	17	462	481	2023-03-20	5	52.75
17	18	377	101	2024-08-07	4	193.96
18	19	496	60	2023-11-17	9	316.26
19	21	356	287	2024-12-05	3	120.57
20	22	177	427	2024-06-10	3	54.00
21	23	119	301	2023-08-04	3	64.98
22	24	266	192	2023-07-10	3	145.11

--8) retrieve all the orders where the total amount exceeds \$20:

	order_id [PK] integer	customer_id integer	book_id integer	order_date date	quantity integer	total_amount numeric (10,2)
1	1	84	169	2023-05-26	8	188.56
2	2	137	301	2023-01-23	10	216.60
3	3	216	261	2024-05-27	6	85.50
4	4	433	343	2023-11-25	7	301.21
5	5	14	431	2023-07-26	7	136.36
6	6	439	119	2024-10-11	5	249.40
7	7	195	467	2023-10-23	6	82.92
8	8	32	159	2024-05-07	4	144.84
9	9	109	407	2024-01-04	9	379.71
10	10	94	122	2024-07-09	4	123.00
11	11	131	206	2023-10-16	1	38.01
12	12	454	3	2024-06-17	2	31.50
13	13	420	180	2023-06-08	5	125.45
14	14	454	319	2023-08-24	2	85.22
15	15	127	479	2023-01-10	6	229.62
16	16	412	196	2023-10-06	8	53.52
17	17	462	481	2023-03-20	5	52.75
18	18	377	101	2024-08-07	4	193.96
19	19	496	60	2023-11-17	9	316.26
20	21	356	287	2024-12-05	3	120.57
21	22	177	427	2024-06-10	3	54.00
22	23	119	301	2023-08-04	3	64.98

--9) list all the genre that are available in table Books:

	genre character varying (50)
1	Romance
2	Biography
3	Mystery
4	Fantasy
5	Fiction
6	Non-Fiction
7	Science Fiction

--10) find the book with the lowest stock:

	book_id [PK] integer	title character varying (100)	author character varying (100)	genre character varying (50)	published_year integer	price numeric (10,2)	stock integer
1	163	Object-based eco-centric challenge	Douglas Mccarthy	Non-Fiction	1905	19.11	0
2	127	Business-focused real-time benchma...	David Nelson	Science Fiction	1997	11.66	0
3	60	Robust eco-centric capacity	Brian Haney	Biography	1990	35.14	0
4	44	Networked systemic implementation	Ryan Frank	Science Fiction	1965	13.55	0
5	378	Future-proofed heuristic function	Samantha Moolain	Romance	1903	6.01	0

--11) calculate the total revenues generated from all orders:

	total_revenue_generated numeric
1	75628.66

ADVANCED QUERIES

--1) retrieve the total no. of books sold for each genre:

	genre character varying (50)	total_books_sold bigint
1	Romance	439
2	Biography	285
3	Mystery	504
4	Fantasy	446
5	Fiction	225
6	Non-Fiction	351
7	Science Fiction	447

--2) find the average price of books in the 'fantasy' genre:

	book_id integer	title character varying (100)	order_count bigint
1	273	Devolved zero administration process improvement	4
2	333	Advanced responsive extranet	4
3	120	Integrated secondary access	4
4	73	Realigned multi-tasking installation	4
5	491	Pre-emptive intangible adapter	4
6	88	Robust tangible hardware	4
7	31	Implemented encompassing conglomeration	4
8	387	Grass-roots disintermediate analyzer	3
9	146	Stand-alone hybrid framework	3
10	127	Business-focused real-time benchmark	3
11	288	Re-contextualized real-time Graphic Interface	3
12	208	Synergized intangible methodology	3
13	469	Automated 5th generation customer loyalty	3
14	427	Ergonomic zero-defect software	3
15	142	Multi-tiered responsive parallelism	3
16	219	Reactive bandwidth-monitored architecture	3
17	110	Re-contextualized radical matrix	3
18	119	Switchable modular moratorium	3
19	466	Multi-channelled mission-critical initiative	3
20	384	Multi-channelled needs-based intranet	3
21	157	Advanced didactic time-frame	3
22	442	Enhanced grid-enabled budgetary management	3

--3) list the customers who have placed atleast 2 orders:

	book_id integer	title character varying (100)	order_count bigint
1	333	Advanced responsive extranet	4
2	273	Devolved zero administration process improveme...	4
3	88	Robust tangible hardware	4
4	31	Implemented encompassing conglomeration	4
5	491	Pre-emptive intangible adapter	4
6	73	Realigned multi-tasking installation	4
7	120	Integrated secondary access	4

--4) find the most frequently ordered book:

	book_id integer	title character varying (100)	order_count bigint
1	88	Robust tangible hardware	4

--5) show the top 3 most expensive books of 'Fantasy' genre:

	book_id [PK] integer	title character varying (100)	author character varying (100)	genre character varying (50)	published_year integer	price numeric (10,2)	stock integer
1	240	Stand-alone content-based hub	Lisa Ellis	Fantasy	1957	49.90	41
2	462	Innovative 3rdgeneration databa...	Allison Contreras	Fantasy	1988	49.23	62
3	238	Optimized even-keeled analyzer	Sherri Griffith	Fantasy	1975	48.97	72

--6) retrieve the total quantity of books sold by each author:

	author character varying (100)	total_books_sold bigint
1	Jared Cortez	10
2	Tracy Parker	11
3	Taylor Wang	9
4	Cathy Knight	6
5	Bianca Matthews	3
6	Douglas Malone	6
7	James Alvarado	9
8	Betty Cross	6
9	Michael Hill	20
10	Steven McDonald	15
11	Paul Miles	19
12	Leonard Vega	3
13	Grace Waller	15
14	Jordan Holt	3
15	Jacob French	17
16	Ryan Clark	1
17	John Bradley	10
18	Rachel Travis	5
19	Margaret Moore	8
20	Amber Wells	3
21	Brandon Martin	7
22	Jackson Hill	4






--7) list the cities where the customers who spent over \$30 are located:

	city character varying (50) 🔒	total_amount numeric (10,2) 🔒
1	Taylorfurt	189.45
2	Leepport	141.39
3	Port Jasonview	149.12
4	Port Aaronstad	145.44
5	Matthewfurt	328.50
6	Angelaside	42.19
7	Lindaburgh	325.92
8	Stephanieberg	156.60
9	Freemanland	198.75
10	Natashaville	399.04
11	North Joseph	125.45
12	North Stephenmouth	281.94
13	Pamelaland	192.64
14	Pennyland	248.85
15	North Emily	31.68
16	West Kimberly	80.82
17	South Timothy	43.65
18	Port Nicoleview	127.12
19	West Robertport	241.75
20	Bradleyburgh	168.90
21	Brandimouth	361.60
22	North Keith	70.32

--8) find the customers who spent the most on orders:

	customer_id [PK] integer 🔒	name character varying (100) 🔒	total_spend numeric 🔒
1	457	Kim Turner	1398.90

--9) calculate the stock remaining after fulfilling all the orders:

	book_id [PK] integer 	title character varying (100) 	stock integer 	order_quantity bigint 	remaining_quantity bigint 
1	1	Configurable modular throughput	100	3	97
2	2	Persevering reciprocal knowledge user	19	0	19
3	3	Streamlined coherent initiative	27	5	22
4	4	Customizable 24hour product	8	0	8
5	5	Adaptive 5thgeneration encoding	16	8	8
6	6	Advanced encompassing implementation	2	0	2
7	7	Open-architected exuding structure	95	5	90
8	8	Persistent local encoding	84	3	81
9	9	Optimized interactive challenge	70	0	70
10	10	Ergonomic national hub	25	1	24
11	11	Secured zero tolerance time-frame	10	5	5
12	12	Polarized optimal array	63	0	63
13	13	Adaptive 5thgeneration orchestration	99	9	90
14	14	Re-engineered demand-driven parallelism	95	0	95
15	15	User-friendly motivating strategy	58	0	58
16	16	Vision-oriented tangible project	8	1	7
17	17	Reduced secondary core	45	9	36
18	18	Adaptive 4thgeneration concept	32	14	18
19	19	Progressive asymmetric Internet solution	1	1	0
20	20	Face-to-face systematic throughput	64	0	64
21	21	Down-sized static interface	87	3	84
22	22	Multi-layered optimizing migration	78	0	78