PEDDA JAGADEESH
AF0366969

ANP_C7281_Right_join

Lab10_ANP_C7281_Right_join

Lab: Use the same student management system Database and table from the previous

lab. Perform the following commands on the table Student and Enrollment.

- 1. Assume a university where students can enroll in various courses. Now, write down a FULL outer JOIN query to retrieve the details.
- 2. Assume a university where students can enroll in various courses. Now, write down a Natural JOIN query to retrieve the details.

Submission:

Create an SQL script file containing your solutions for all tasks (queries). Name the file "lab_assignment1.sql" Provide comments above each query to indicate the query's purpose.

ChatGPT Exercise

Using ChatGPT generates SQL queries of the below problem.

Scenario 1: We have an "inventory" Table with the following

columns: ProductID, ProductName, StockQuantity, and "sales" Table with the following columns: SaleID, ProductID(foreign key), SaleQuantity, SaleDate. Now you need to use full outer join to generate a report that includes all products in the inventory and their sales, displaying NULL values for products that haven't been sold. Generate the chatGPT

prompt for the above scenario.

SOLUTION:

1. Assume a university where students can enroll in various courses. Now, write down a

FULL outer JOIN query to retrieve the details.

Code:

SELECT

Student.StudentId,

Student.StudentName,

Student.BirthDate,

Student.Email AS Email,

Enrollment.EnrollmentId,

Enrollment.StudentId AS EnrollmentStudentId,

Enrollment.CourseId,

Enrollment.EnrollmentDate,

Enrollment.CourseName

FROM

Student

LEFT JOIN

Enrollment

ON

Student.StudentId = Enrollment.StudentId

```
| Student | Stud
```

1 19	l Shiv Kapoor	2000-11-28	shiv.kapoor@example.com	19	19	119	2022-07-14	NULL
i 19	Shiv Kapoor	2000-11-28	shiv.kapoor@example.com	19 69	19	119	2022-07-14	Management
20	Aarav Jain	2001-02-15	aarav.jain@example.com	20	20	120	2022-08-28	NULL
20	Aarav Jain	2001-02-15	aarav.jain@example.com	70 I	20	120	2022-08-28	Engineering
i 21	Vivaan Singh	2002-04-22	vivaan.singh@example.com	ži	21	121	2022-09-15	NULL I
21	Vivaan Singh	2002-04-22	vivaan.singh@example.com	5 5	21 21 22	121	2022-09-15	Medicine
22	Aditya Gupta	2002-04-22	aditya.gupta@example.com	71 22 72	21	122	2022-10-22	I NULL
22	Aditya Gupta	2003-07-10	aditya.gupta@example.com	72	22	122	2022-10-22	Law
23	Multya Gupta Vihaan Kumar	2003-07-10	vihaan.kumar@example.com	/4	22	123	2022-10-22	I Law
23				23	23	123	2022-11-10	
23	Vihaan Kumar	2000-09-05	vihaan.kumar@example.com	/3	23	123	2022-11-10	Architecture
24	Arjun Patel	2001-12-18	arjun.patel@example.com	23 73 24 74 25 75	23 23 24 24 25			NULL
. 24	Arjun Patel	2001-12-18	arjun.patel@example.com	/4	24	124	2022-12-05	Environmental Science
24 25 25 25	Sai Reddy	2002-03-30	sai.reddy@example.com	25	25	125	2023-01-18	NULL
25	Sai Reddy	2002-03-30	sai.reddy@example.com	75		125	2023-01-18	Journalism
26 26 27	Reyansh Nair	2003-06-12	reyansh.nair@example.com	26 76 27 77	26 26 27 27	126	2023-02-27	NULL
] 26	Reyansh Nair	2003-06-12	reyansh.nair@example.com	76	26	126	2023-02-27	Mass Communication
27	Ayaan Iyer	2000-07-25	ayaan.iyer@example.com	27	27	127	2023-03-30	NULL
27	Ayaan Iyer	2000-07-25	ayaan.iyer@example.com	77	27	127	2023-03-30	Fine Arts
28	Krishna Rao	2001-10-19	krishna.rao@example.com	28	28	128	2023-04-12	NULL
28	Krishna Rao	2001-10-19	krishna.rao@example.com	78	28 29	128	2023-04-12	Performing Arts
29	Ishaan Mehta	2002-01-03	ishaan.mehta@example.com	29	29	129	2023-05-19	NULL
i 28 29 29	l Ishaan Mehta	2002-01-03	ishaan.mehta@example.com	29 79	29	129	2023-05-19	Graphic Design
30	Kabir Joshi	2003-04-14	kabir.joshi@example.com	30	30	130	2023-06-25	NULL
j 30	Kabir Joshi	2003-04-14	kabir.joshi@example.com	80	30	130	2023-06-25	Animation
l 31	Arnay Das	2000-08-29	arnay.das@example.com	l 31 l	31	131	2023-07-10	i NULL i
i 31	Arnav Das	2000-08-29	arnav.das@example.com	i 81 i	31 31	131	2023-07-10	Fashion Design
32 32 32 33 33	Atharv Chatterjee	2001-05-07	atharv.chatterjee@example.com	32 82	32 32 33	132	2023-08-05	NULL
32	Atharv Chatterjee	2001-05-07	atharv.chatterjee@example.com	82	32	132	2023-08-05	Interior Design
1 33	Dhyey Mukherjee	2002-09-22	dhyey.mukherjee@example.com	33	33	133	2023-09-22	NULL
33	Dhyey Mukherjee	2002-09-22	dhyey.mukherjee@example.com	83	33	133	2023-09-22	Hotel Management
34	Aarush Roy	2003-02-10	aarush.roy@example.com	34	34	134	2023-10-17	NULL
i 34 i 34 i 35	Aarush Roy	2003-02-10	aarush.roy@example.com	34 84 35	33 34 34 35	134	2023-10-17	Tourism
35	Rudra Bhattacharya	2000-06-18	rudra.bhattacharya@example.com	37	25	135	2023-11-14	NULL
35	Rudra Bhattacharya	2000-06-18	rudra.bhattacharya@example.com	85	35	135	2023-11-14	Culinary Arts
33	Advait Banerjee	2000-00-18	advait.banerjee@example.com	36	35	136	2023-11-14	NULL
36 36 37 37	Advait Baneriee	2001-11-25	advait.banerjee@example.com	30	36 36 37 37	136	2023-12-29	Agriculture
30	Yug Verma	2001-11-23	yug.verma@example.com	86 37 87	30	137	2023-12-29	NULL
37	l Yug Verma	2002-08-17	yug.verma@example.com	3/	37	137	2024-01-07	Horticulture
3/		2002-08-17	shiv.kapoor@example.com	38	38	138	2024-01-07	
38	Shiv Kapoor		sniv.kapoor@example.com	38	38		2024-02-22	NULL
i 38 i 39 i 39	Shiv Kapoor	2003-11-28	shiv.kapoor@example.com	88 39	38 39	138	2024-02-22 2024-03-10	Forestry
39	Aarav Jain	2000-02-15	aarav.jain@example.com	1 39 1 89	39	139		NULL
39	Aarav Jain	2000-02-15	aarav.jain@example.com		39	139	2024-03-10	Veterinary Science
40	Vivaan Singh	2001-04-22	vivaan.singh@example.com	40	40	140	2024-04-10	NULL
! 40	Vivaan Singh	2001-04-22	vivaan.singh@example.com	90	40	140	2024-04-10	Zoology
41	Aditya Gupta	2002-07-10	aditya.gupta@example.com	41	41	141	2024-05-17	NULL
41	Aditya Gupta	2002-07-10	aditya.gupta@example.com	91	41	141	2024-05-17	Botany
! 42	Vihaan Kumar	2003-09-05	vihaan.kumar@example.com	42 92 43 93 44 94 45 95	42	142	2024-06-12	NULL
! 42	Viḥaan Kumar	2003-09-05	vihaan.kumar@example.com	92		142	2024-06-12	Microbiology
43	Arjun Patel	2000-12-18	arjun.patel@example.com	43		143	2024-07-14	NULL
43	Arjun Patel	2000-12-18	arjun.patel@example.com	93		143	2024-07-14	Biotechnology
j 44	Sai Reddy	2001-03-30	sai.reddy@example.com	44	44	144	2024-08-28	NULL
j 44	Sai Reddý	2001-03-30	sai.reddy@example.com	94	44	144	2024-08-28	Genetics Activate Win
45	Reyansh Nair	2002-06-12	reyansh.nair@example.com			145	2024-09-15	
45	Reyansh Nair	2002-06-12	reyansh.nair@example.com	95		145	2024-09-15	Marine BiologyGo to Settings to
46	Ayaan Iyer	2003-07-25	ayaan.iyer@example.com	46	46	146	2024-10-22	NULL
46	Ayaan Iyer	2003-07-25	ayaan.iyer@example.com	96	46	146	2024-10-22	Astronomy
	•	·			•	<u> </u>		

46	Ayaan Iyer	2003-07-25	ayaan.iyer@example.com	46	46	146		NULL
	Ayaan Iyer		ayaan.iyer@example.com	96	46	146	2024-10-22	Astronomy
	Krishna Rao	2000-10-19	krishna.rao@example.com	47	47	147	2024-11-10	NULL
	Krishna Rao	2000-10-19	krishna.rao@example.com			147	2024-11-10	Astrophysics
	Ishaan Mehta	2001-01-03		48	48	148		NULL
	Ishaan Mehta	2001-01-03		98	48	148		Geology
	Kabir Joshi			49	49			NULL
49	Kabir Joshi	2002-04-14		99	49		2025-01-18	Meteorology
50	Arnav Das	2003-08-29		50	50	150		NULL
	Arnav Das	2003-08-29	arnav.das@example.com	100	50	150		Electrical
	Atharv Chatterjee	2000-05-07	atharv.chatterjee@example.com	NULL	NULL	NULL	NULL	NULL
	Dhyey Mukherjee	2001-09-22		NULL	NULL	NULL	NULL	NULL
	Aarush Roy	2002-02-10	aarush.roy@example.com	NULL	NULL	NULL	NULL	NULL
54	Rudra Bhattacharya			NULL	NULL	NULL	NULL	NULL
55	Advait Banerjee			NULL	NULL	NULL	NULL	NULL
56	Yug Verma	2001-08-17	yug.verma@example.com	NULL	NULL	NULL	NULL	NULL
+								
106 rows in set (0.00 sec)								

SELECT

Student.StudentId,

Student.StudentName,

Student.BirthDate,

Student.Email AS Email,

Enrollment.EnrollmentId,

Enrollment.StudentId AS EnrollmentStudentId,

Enrollment.CourseId,

Enrollment.EnrollmentDate,

Enrollment.CourseName

FROM

Student

RIGHT JOIN

Enrollment

ON

Student.StudentId = Enrollment.StudentId;

-> SI -> SI -> SI -> EI -> EI -> EI -> EI -> EI -> FROM -> RIGHT -> ON	tudent. StudentId, tudent. StudentName, tudent. BirthDate, tudent. Email AS Email nrol lment. Enrol lmentIn nrol lment. StudentId A nrol lment. CourseId, nrol lment. CourseVame tudent JOIN nrol lment to tudent tudent tudent tudent. StudentId = En	d, S EnrollmentS ate,	entId;						
StudentId	StudentName	BirthDate		EnrollmentId	EnrollmentStudentId	CourseId	EnrollmentDate	CourseName	i
1 2 3 4 5 6 6 7 8 8 9 10 11 12 13 14 15 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Agrav Sharma Varav Sharma Vivaan Singh Aditya Gupta Vihaan Kumar Arjun Patel Sai Reddy Reyansh Nair Ayaman Iyea An Sai Reddy Reyansh Nair Arjan Battachary Atharav Das Atharav Chatterjee Dhyey Mukherjee Aarush Roy Rudra Bhattacharya Ayun Sharav Aryan Roy Rudra Bhattacharya Ayun Verma Shiv Kapoor Aarav Jain Vivaan Singh Aditya Gupta Vihaan Kumar Arjun Patel Reyansh Nair Ayaan Iyer Krishna Rao Ishaan Mehta Kabir Joshi Arnav Das Athay Wukherjee Arnav Das Athay Wukherjee Aarush Roy Rudda Bhattacharya	2000-01-15 2001-03-22 2002-07-10 2001-03-22 2002-07-10 2003-02-18 2003-02-18 2003-08-13 2002-08-03 2003-08-13 2000-10-14 2001-01-29 2002-08-03 2008-03 2008-03 2008-03 2008-03 2008-03 2008-03 2009-08-08-09 2009-08-08-08 2009-08-08 2009-08-0	vivaan.singh@example.com aditya.gupta@example.com vihaan.kumar@example.com arjun.padca@example.com arjun.padca@example.com reyansh.nair@example.com ayaan.jver@example.com krishna.rao@example.com shaan.meinta@example.com kabir.joshi@example.com arian.deseexample.com diyey.mukherjee@example.com dhyey.mukherjee@example.com adarush.roowexample.com adarush.roowexample.com adarush.roowexample.com adarush.roowexample.com adarush.roowexample.com adarush.roowexample.com	18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	2 2 3 4 5 6 7 8 8 9 9 9 10 11 11 12 13 14 15 16 16 17 20 21 22 23 24 25 26 26 27 27 27 28 29 30 31 31 31 31 31 31 31 31 31 31 31 31 31	101 102 102 103 104 105 106 108 109 110 111 111 111 111 114 115 116 117 121 122 123 124 125 126 127 127 128 129 121 131 131 144 121 121 122 123 124 125 126 127 127 128 129 129 120 121 131 131 131 131 131 131 131 131 131	2021-01-15 2021-02-22 2021-03-10 2021-04-05 2021-03-10 2021-04-05 2021-05-18 2021-05-18 2021-05-18 2021-06-30 2021-06-30 2021-10-14 2021-10-19 2022-01-17 2022-01-17 2022-07-14 2021-08-28 2022-07-14 2021-08-28 2022-09-15 2022-09-15 2022-01-22 2023-01-22 2023-01-22 2023-01-22 2023-01-22 2023-01-22 2023-01-22 2023-01-22 2023-01-22 2023-01-22 2023-01-22 2023-01-22 2023-01-22 2023-01-22 2023-01-21 2023-01-27 2023-01-27 2023-01-27 2023-01-27	NULL	vate Windows
36 37 38 39	Advait Banerjee Yug Verma Shiv Kapoor Aarav Jain	2001-11-25 2002-08-17 2003-11-28 2000-02-15	advait.banerjee@example.com yug.verma@example.com shiv.kapoor@example.com aarav.jain@example.com	36 37 38 39	36 37 38 39	136 137 138 139	2023-12-29 2024-01-07 2024-02-22 2024-03-10	NULL NULL NULL NULL	

37 38 39 40	Yug Verma Shiv Kapoor	2002-08-17 2003-11-28	yug.verma@example.com shiv.kapoor@example.com	37 38 39 40	37 38 39 40	137 138	2024-01-07 2024-02-22	NULL
1 39		2003-11-28						
39			Dirittinapoor Contamp (C) Com	30	20			
	Aarav Jain	2000-02-15	aarav.jain@example.com	39	39	139	2024-03-10	NULL
	Vivaan Singh	2001-04-22	vivaan.singh@example.com	40	40	140	2024-04-10	NULL
41	Aditya Gupta	2002-07-10	aditya.gupta@example.com	41		141	2024-05-17	NULL
. 42	Vihaan Kumar	2003-09-05	vihaan.kumar@example.com	41 42 43		142	2024-06-12	NULL
43	Arjun Patel	2000-12-18	arjun.patel@example.com	43		143	2024-07-14	NULL
44	Sai Reddy	2001-03-30	sai.reddy@example.com	44 45	44 45	144	2024-08-28	NULL
45	Reyansh Nair	2002-06-12	reyansh.nair@example.com	45	45	145	2024-09-15	NULL
46	Ayaan Iyer	2003-07-25	ayaan.iyer@example.com	46	46	146	2024-10-22	NULL
47	Krishna Rao	2000-10-19	krishna.rao@example.com			147	2024-11-10	NULL
48	Ishaan Mehta	2001-01-03	ishaan.mehta@example.com	48	48	148	2024-12-05	NULL
49	Kabir Joshi	2002-04-14	kabir.joshi@example.com		49	149	2025-01-18	NULL
50	Arnav Das	2003-08-29	arnav.das@example.com	50	50	150	2025-02-27	NULL
1	Aarav Sharma	2000-01-15	l aarav.sharma@example.com	51	1	101	2021-01-15	Mathematics
1 2	Vivaan Singh	2001-03-22	vivaan.singh@example.com	52		102	2021-02-22	Physics
] 3	Aditya Gupta	2002-07-10	aditya.gupta@example.com	53		103	2021-03-10	Chemistry
4	Vihaan Kumar	2000-11-05	l vihaan.kumar@example.com	54		104	2021-04-05	Biology
j 5	Arjun Patel	2003-02-18	arjun.patel@example.com	51 52 53 54 55 56 56		105	2021-05-18	Computer Science
j 6	Sai Reddy	2001-06-30	sai.reddy@example.com	56	6	106	2021-06-30	History
7	Reyansh Nair	2002-09-12	reyansh.nair@example.com			107	2021-07-12	Geography
i 8	Ayaan Iyer	2000-12-25	ayaan.iyer@example.com	58	8	108	2021-08-25	Political Science
į g	Krishna Rao	2001-04-19	krishna.rao@example.com	59	9	109	2021-09-19	Economics
10	Ishaan Mehta	2002-08-03	ishaan.mehta@example.com	60	10	110	2021-10-03	English Literature
11	Kabir Joshi	2000-10-14	kabir.joshi@example.com	61	11	111	2021-11-14	Philosophy
12	Arnav Das	2001-01-29	arnav.das@example.com	62	12	112	2021-12-29	Sociology
13	Atharv Chatterjee	2002-05-07	atharv.chatterjee@example.com	63	13	113	2022-01-07	Psychology
1 14	Dhyey Mukherjee	2003-09-22	dhyey.mukherjee@example.com	64	14	114	2022-02-22	Statistics
15	Aarush Roy	2000-02-10	aarush.roy@example.com	65	15	1115	2022-03-10	Business Administration
15 16 17	Rudra Bhattacharya	2001-03-18	rudra.bhattacharya@example.com	66	16	116	2022-04-10	Marketing
17	Advait Banerjee	2002-06-25	advait.banerjee@example.com	67	17	117	2022-05-17	Finance
18	Yug Verma	2003-08-17	yug.verma@example.com	68	18	118	2022-06-12	Accounting
19	Shiv Kapoor	2000-11-28	shiv.kapoor@example.com	69	19	119	2022-07-14	Management
20	Aarav Jain	2001-02-15	aarav.jain@example.com	70	20	120	2022-08-28	Engineering
21	Vivaan Singh	2002-04-22	vivaan.singh@example.com	71	21	121	2022-09-15	Medicine
22	Aditya Gupta	2003-07-10	aditya.gupta@example.com	72	21 22 23	122	2022-10-22	Law
i 22 i 23	Vihaan Kumar	2000-09-05	vihaan.kumar@example.com	72 73	73	123	2022-11-10	Architecture
24	Arjun Patel	2001-12-18	arjun.patel@example.com	74	24	124	2022-12-05	Environmental Science
25	Sai Reddy	2002-03-30	sai.reddy@example.com	75	25	125	2023-01-18	Journalism
26	Revansh Nair	2003-06-12	reyansh.nair@example.com	76	26	126	2023-02-27	Mass Communication
27	Ayaan Iyer	2000-07-25	ayaan.iyer@example.com	77	27	127	2023-03-30	Fine Arts
28	Krishna Rao	2001-10-19	krishna.rao@example.com	78	28	128	2023-04-12	Performing Arts
20	Ishaan Mehta	2002-01-03	ishaan.mehta@example.com	70	20	129	2023-05-19	Graphic Design
29	Kabir Joshi	2002-01-03	kabir.joshi@example.com	79 80	29 30	130	2023-06-25	Animation
31	Arnav Das	2003-04-14	arnav.das@example.com	81	31	131	2023-00-23	Fashion Design
32	Atharv Chatterjee	2001-05-07	atharv.chatterjee@example.com	82	32	132	2023-07-10	Interior Design
33	Dhyey Mukherjee	2001-03-07	dhyey.mukherjee@example.com	83	32	133	2023-08-03	Hotel Management
33	Aarush Roy	2002-09-22		84	33	133	2023-09-22	
34	Adrush Roy	2003-02-10	aarush.roy@example.com		34			Tourism
35 36 37	Rudra Bhattacharya	2000-06-18	rudra.bhattacharya@example.com	85	35	135	2023-11-14	Culinary Arts
36	Advait Banerjee	2001-11-25	advait.banerjee@example.com	86	36 37	136	2023-12-29	Agriculture
3/	Yug Verma	2002-08-17	yug.verma@example.com	87	3/	137	2024-01-07	Horticulture
38	Shiv Kapoor	2003-11-28	shiv.kapoor@example.com	88	38	138	2024-02-22	Forestry Veterinary Science Win
39	Aarav Jain	2000-02-15	aarav.jain@example.com	89	39	139	2024-03-10	Veterinary Science Vill Zoology Go to Settings to
40	Vivaan Singh	2001-04-22	vivaan.singh@example.com	90	40	140	2024-04-10	
41	Aditya Gupta	2002-07-10	aditya.gupta@example.com	91	41	141	2024-05-17	Botany
42	Vihaan Kumar	2003-09-05	vihaan.kumar@example.com			142	2024-06-12	Microbiology

41	Aditya Gupta	2002-07-10	aditya.gupta@example.com	91	41	141	2024-05-17	Botany
42	Vihaan Kumar	2003-09-05	vihaan.kumar@example.com	92	42	142	2024-06-12	Microbiology
43	Arjun Patel	2000-12-18	arjun.patel@example.com	93	43	143	2024-07-14	Biotechnology
44	Sai Reddy	2001-03-30	sai.reddy@example.com	94	44	144	2024-08-28	Genetics
45	Reyansh Nair	2002-06-12	reyansh.nair@example.com	94 95	45	145	2024-09-15	Marine Biology
46	Ayaan Iyer	2003-07-25		96	46	146	2024-10-22	Astronomy
47	Krishna Rao	2000-10-19	krishna.rao@example.com	97		147	2024-11-10	Astrophysics
48	Ishaan Mehta	2001-01-03	ishaan.mehta@example.com	98	48	148	2024-12-05	Geology
49	Kabir Joshi	2002-04-14	kabir.joshi@example.com	j 99	49	149	2025-01-18	Meteorology
50	Arnav Das	2003-08-29	arnav.das@example.com	100	50	150	2025-02-27	Electrical
į								-+
100 rows in	set (0.00 sec)							

2. Assume a university where students can enroll in various courses.Now, write down a Natural JOIN query to retrieve the details.

Code:

SELECT

Student.StudentId,

Student.StudentName,

Student.BirthDate,

Student.Email,

Enrollment.EnrollmentId,

Enrollment.CourseId,

Enrollment.EnrollmentDate,

Enrollment.CourseName

FROM

Student

NATURAL JOIN

Enrollment;

```
CT
Student.StudentId,
Student.StudentName,
Student.BirthDate,
Student.Email,
Enrollment.EnrollmentId,
Enrollment.CourseId,
Enrollment.CourseMame
FROM
Student
NATURAL JOIN
Enrollment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email

aarav.sharma@example.com
aarav.sharma@example.com
vivaan.singh@example.com
vivaan.singh@example.com
vivaan.singh@example.com
aditya.gupta@example.com
aditya.gupta@example.com
vihaan.kumar@example.com
vihaan.kumar@example.com
arjun.patel@example.com
arjun.patel@example.com
sai.reddy@example.com
sai.reddy@example.com
reyansh.nair@example.com
reyansh.nair@example.com
reyansh.nair@example.com
krishna.rao@example.com
kabir.joshi@example.com
kabir.joshi@example.com
atharv.chatterjee@example.com
atharv.chatterjee@example.com
dhyey.mukherjee@example.com
dhyey.mukherjee@example.com
advait.banerjee@example.com
advait.banerjee@example.com
sarush.roy@example.com
advait.banerjee@example.com
sarush.roy@example.com
sarush.ray@example.com
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```

Using ChatGPT generates SQL queries of the below problem.

Scenario 1: We have an "inventory" Table with the following

columns: ProductID, ProductName, StockQuantity, and "sales" Table with following columns: SaleID, ProductID(foreign key), SaleQuantity, SaleDate.Now you need to use full outer join to generate a report that includes all products in the inventory and their sales, displaying NULL values for products that haven't been sold. Generate the chatGPT

prompt for the above scenario.

(5, 'Product E', 300),

```
Code:
-- Create inventory table
CREATE TABLE inventory (
ProductID INT PRIMARY KEY,
ProductName VARCHAR(100),
StockQuantity INT
);
Code:
-- Insert sample values into inventory table
INSERT INTO inventory (ProductID, ProductName, StockQuantity) VALUES
(1, 'Product A', 100),
(2, 'Product B', 150),
(3, 'Product C', 200),
(4, 'Product D', 250),
```

```
(6, 'Product F', 350),(7, 'Product G', 400),(8, 'Product H', 450),(9, 'Product I', 500),(10, 'Product J', 550);
```

Output:

Code:

-- Create sales table

CREATE TABLE sales (

SaleID INT PRIMARY KEY,

ProductID INT,

SaleQuantity INT,

SaleDate DATE,

```
FOREIGN KEY (ProductID) REFERENCES inventory(ProductID) );
```

-- Insert sample values into sales table

INSERT INTO sales (SaleID, ProductID, SaleQuantity, SaleDate) VALUES

```
(1, 1, 10, '2023-01-01'),

(2, 2, 20, '2023-01-02'),

(3, 3, 30, '2023-01-03'),

(4, 4, 40, '2023-01-04'),

(5, 5, 50, '2023-01-05'),

(6, 6, 60, '2023-01-06'),

(7, 7, 70, '2023-01-07'),

(8, 8, 80, '2023-01-08'),

(9, 9, 90, '2023-01-09'),
```

(10, 10, 100, '2023-01-10');

-- Query to generate report with FULL OUTER JOIN

SELECT

```
inventory.ProductID,
inventory.ProductName,
inventory.StockQuantity,
sales.SaleID,
sales.SaleQuantity,
sales.SaleDate
```

FROM

inventory

LEFT JOIN

sales

ON

inventory.ProductID = sales.ProductID

```
mysql> -- Query to generate report with FULL OUTER JOIN
ýsql> SELECT
               inventory.ProductID,
inventory.ProductName,
inventory.StockQuantity,
sales.SaleID,
sales.SaleQuantity,
sales.SaleDate
          FROM
                inventory
         LEFT JOIN
sales
                inventory.ProductID = sales.ProductID;
  ProductID
                    ProductName
                                         StockQuantity
                                                                 SaleID
                                                                              SaleQuantity 5 4 1
                                                                                                    SaleDate
                                                                                                     2023-01-01
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                    Product
                                                        500
                                                                                             90
                                                                       1ŏ
                                                                                            100
             10
                    Product
10 rows in set (0.00 sec)
```

SELECT

inventory.ProductID,

inventory.ProductName,

inventory.StockQuantity,

sales.SaleID,

sales.SaleQuantity,

sales.SaleDate

FROM

inventory

RIGHT JOIN

sales

ON

inventory.ProductID = sales.ProductID;

```
mysql> SELECT
                 inventory.ProductID,
inventory.ProductName,
inventory.StockQuantity,
sales.SaleID,
sales.SaleQuantity,
sales.SaleDate
          FROM
                  inventory
          RIGHT JOIN
sales
      -> ON
                  inventory.ProductID = sales.ProductID;
  ProductID | ProductName | StockQuantity | SaleID
                                                                                       SaleQuantity
                                                                                                                SaleDate
                                                                                                                2023-01-01
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                                                                                                                 2023-01-10
10 rows in set (0.00 sec)
```

TIANN YOU. SIN