


Assignment Case	
Database H3	
Periode Berlaku Semester Genap 2023/2024 Valid on Even Year 2023/2024	Software Laboratory Center Assistant Recruitment 24-2

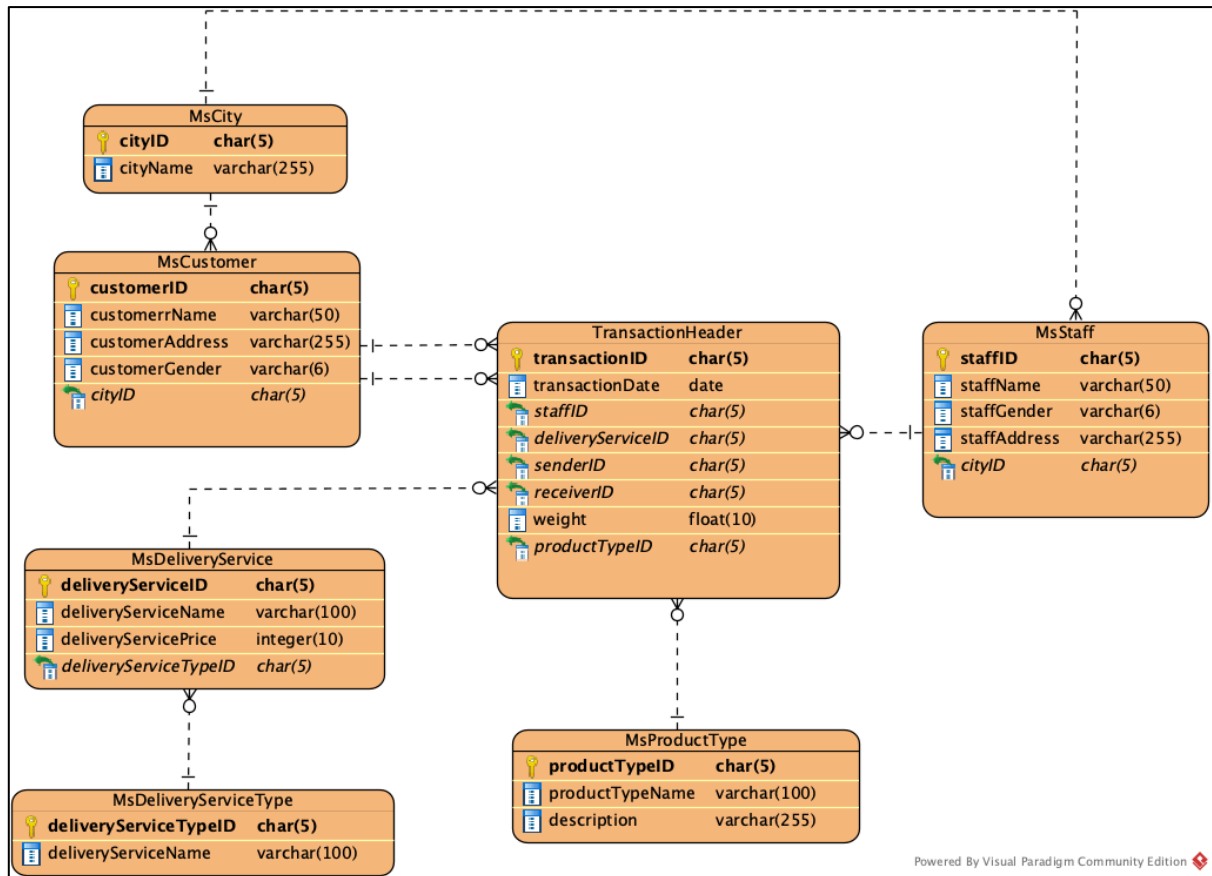
Note: Please focus on the main logic and main features!
(Splash screen and design are not scored)

Soal

Case

JnZ Express

JnZ Express is a dedicated parcel delivery service offering efficient and reliable logistics solutions. With a focus on speed, security, and customer satisfaction, we provide both local and intercity delivery options with transparent and competitive rates. Our professional team ensures precision and real-time updates for customers, utilizing advanced technology for accurate tracking. **JnZ Express** is committed to sustainability, implementing eco-friendly packaging practices. Choose **JnZ Express** for a logistics partner that understands and meets your business needs with dependable shipping solutions.



Picture 1. JnZ Express ERD

Notes

- Import **JnzExpress.bak** file (attached with the case), then **execute** the file on **SQL Server Management Studio (SSMS)**.
- Please **include the number of the question** in you answer SQL file.

1. Display the **Sender Name** (obtained from **customerName**), **Receiver Name** (obtained from **customerName**), and **Transaction Date** (obtained from **transactionDate**) where the **3rd digit** from **transactionID** is a **multiple of four** and the transaction occurred in **February**.
(MONTH, RIGHT)

	Sender Name	Receiver Name	Transaction Date
1	David Lee	Sophie Taylor	2024-02-20
2	Frank Wilson	Grace Brown	2024-02-24

Figure 1. Query Result Case Number 1

2. Display the **Staff Name** (obtained by capitalizing the **staffName**), **Staff Address** (obtained from **staffAddress**), and **Staff City** (obtained from **cityName**) where the staff address **must start** with a **two-digit number** and the **second digit is 0**.
(LIKE, UPPER)

	Staff Name	Staff Address	Staff City
1	EMILY WILSON	10 Enterprise Street	Medan
2	SARAH MILLER	30 Work Lane	Makassar
3	DANIEL BROWN	40 Executive Road	Palembang

Figure 2. Query Result Case Number 2

3. Display the **Transaction ID** (obtained from **transactionID**), **Transaction Month** (obtained from the **month** of **transaction Date**), **Delivery Service Name** (obtained from **deliveryServiceName**), and **Total Revenue Per Transaction** (obtained from **multiple** of **deliveryServicePrice** and **weight**). Additionally, ensure that the delivery service name **consists of three words**.
(MONTH, LIKE)

	Transaction ID	Transaction Month	Delivery Service Name	Total Revenue Per Transaction
1	TR008	12	Ninja Xpress Standard	12000
2	TR010	4	Wahana Ekspedisi Regular	16500
3	TR018	2	Ninja Xpress Standard	9000
4	TR020	2	Wahana Ekspedisi Regular	13500

Figure 3. Query Result Case Number 3

4. **Update** the **delivery service price** by adding **5000** for transactions where the **last three digits of the transactionID** are **even**, the **description length is more than 20**, the transaction occurred in **April**, and the **deliveryServiceName** has **exactly 3 characters**.

(LEN, RIGHT, MONTH, LIKE)

BEFORE:

	deliveryServiceName	deliveryServicePrice
1	Wahana Ekspedisi Regular	7500

AFTER:

	deliveryServiceName	deliveryServicePrice
1	Wahana Ekspedisi Regular	12500

Figure 4. Query Result Case Number 4

5. Display the **Customer Name** (obtained from **customerName**), **Coupon Code** (obtained by **reversing** the **transactionID**), **Coupon Start Date** (obtained from the **transactionDate** with the **format dd-mm-yyyy**), **Coupon Expiry Date** (obtained by **adding 3 months** to the **transaction date** with the **format dd-mm-yyyy**), and **Coupon Price** (obtained in the **Rp10.000,00 format**) where the **total transaction is greater than 20,000**.

(FORMAT, REVERSE, CONVERT, DATEADD)

	Customer Name	Coupon Code	Coupon Start Date	Coupon Expiry Date	Coupon Price
1	Charlie Davis	300RT	19-01-2023	19-04-2023	Rp10.000,00
2	David Lee	500RT	10-04-2023	10-07-2023	Rp10.000,00
3	John Doe	600RT	30-05-2023	30-08-2023	Rp10.000,00
4	David Lee	010RT	18-04-2023	18-07-2023	Rp10.000,00
5	Bob Johnson	210RT	12-12-2023	12-03-2024	Rp10.000,00
6	Charlie Davis	310RT	02-02-2024	02-05-2024	Rp10.000,00
7	John Doe	610RT	31-01-2024	30-04-2024	Rp10.000,00
8	Frank Wilson	910RT	19-02-2024	19-05-2024	Rp10.000,00
9	David Lee	020RT	20-02-2024	20-05-2024	Rp10.000,00
10	Charlie Davis	320RT	23-02-2024	23-05-2024	Rp10.000,00
11	David Lee	520RT	25-02-2024	25-05-2024	Rp10.000,00

Figure 5. Query Result Case Number 5

6. **Delete** product type for which transactions **occurred** in **quarters 1 and 4** and the **product type description length is greater than 20**.

(QUARTER, LIKE, IN, LEN)

BEFORE:

	productTypeID	productTypeName	description
1	PT003	Caution	Handle with caution

AFTER:

	productTypeID	productTypeName	description
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Figure 6. Query Result Case Number 6

7. **Update** the customer name by **concatenating** it with 'Mr./Mrs.' for customers who made transactions in **February** and used a **delivery service that starts with 'G'**.
(CONCAT, LIKE, MONTH)

BEFORE:

	customerID	customerName	customerAddress	customerGender	cityID
1	CU009	David Lee	606 Fir Road	Male	CT009

AFTER:

	customerID	customerName	customerAddress	customerGender	cityID
1	CU009	Mr./Mrs.David Lee	606 Fir Road	Male	CT009

Figure 7. Query Result Case Number 7

8. **Create a view** named '**Customer_Total_Transaction_More_Than_25000**' that displays the **Sender First Name** (obtained from **senderfirstName**), **Sender Last Name** (obtained from **sender lastname**), **Product Type Name** (obtained from **productTypeName**), **Product Description** (obtained from **productDescription**), **Transaction Date** (obtained from **transactiondate**), **Delivery Service Name** (obtained from **deliveryServiceName**), and **Total Transaction** (obtained from the **multiplication** of **weight** and **deliveryServicePrice**, **formatted in Indonesian currency**) for which **total Transaction was more than 25000**.

(CHARINDEX, SUBSTRING, REVERSE, LEFT, FORMAT, CREATE VIEW)

	Sender First Name	Sender Last Name	Product Type Name	Product Description	Transaction Date	Delivery Service Name	Total Transaction
1	Charlie	Davis	Caution	Handle with caution	2023-01-19	Same-Day Delivery	Rp45.000,00
2	David	Lee	Breakable	May shatter if mishandled	2023-04-10	GoSend Instant	Rp33.600,00
3	John	Doe	Perishable	Handle promptly, may spoil	2023-05-30	GrabExpress Instant	Rp29.900,00
4	Charlie	Davis	Caution	Handle with caution	2024-02-02	Same-Day Delivery	Rp28.500,00
5	John	Doe	Perishable	Handle promptly, may spoil	2024-01-31	GrabExpress Instant	Rp41.600,00
6	Charlie	Davis	Caution	Handle with caution	2024-02-23	Same-Day Delivery	Rp42.000,00

Figure 8. Query Result Case Number 8

9. Create a view named 'Total_Transaction_Using_Sea_Delivery_In_American_Dollar' that displays **Staff Name** (obtained by concatenating the Mr./Mrs. and last name of the staff), **Transaction Date** (obtained from the transaction Date with dd-mm-yyyy format), **Total Revenue** (obtained by multiplying weight and deliveryServicePrice and dividing it by the USD dollar rate (1 USD = 14.000 IDR)), and **Delivery Service Name** (obtained from deliveryServiceName) for transactions that use the Sea Delivery service type.

(FORMAT, CONVERT, SUBSTRING, CHARINDEX, REVERSE, CREATE VIEW)

	Staff Name	Transaction Date	Total Revenue	Delivery Service Name
1	Mr./Mrs.Smith	20-02-2023	\$1.29	Express Delivery
2	Mr./Mrs.Taylor	10-04-2023	\$2.40	GoSend Instant
3	Mr./Mrs.Lee	31-12-2023	\$0.86	Ninja Xpress Standard
4	Mr./Mrs.Smith	12-12-2023	\$1.71	Express Delivery
5	Mr./Mrs.Taylor	05-01-2024	\$1.11	GoSend Instant
6	Mr./Mrs.Lee	18-02-2024	\$0.64	Ninja Xpress Standard
7	Mr./Mrs.Smith	22-02-2024	\$1.00	Express Delivery
8	Mr./Mrs.Taylor	25-02-2024	\$1.71	GoSend Instant

Figure 9. Query Result Case Number 9

10. Display **Staff Email** (obtained by concatenating the last name of the staff with '@gmail.com'), **Total Revenue** (obtained from the multiplication of weight and deliveryServicePrice in Indonesian currency format), **Total Commission** (obtained by multiplying Total Revenue by 20% in Indonesian currency format), and **Transaction Date** (obtained from transactionDate) for transactions with product type 'fragile' and using air delivery. Combine this with **Staff Email** (obtained by concatenating the last name of the staff with '@gmail.com'), **Total Revenue** (obtained from the multiplication of weight and deliveryServicePrice in Indonesian currency format), **Total Commission** (obtained by multiplying Total Revenue by 40% in Indonesian

currency format), and **Transaction Date** (obtained from **transactionDate**) for transactions with product type 'caution' and using sea delivery.

(**FORMAT, SUBSTRING, CHARINDEX, REVERSE, CREATE VIEW, CONCAT, LOWER**)

	Staff Email	Total Revenue	Total Commision	Transaction Date
1	davis@gmail.com	Rp28.500,00	Rp5.700,00	2024-02-02
2	davis@gmail.com	Rp42.000,00	Rp8.400,00	2024-02-23
3	davis@gmail.com	Rp45.000,00	Rp9.000,00	2023-01-19
4	johnson@gmail.com	Rp10.500,00	Rp2.100,00	2024-02-21
5	johnson@gmail.com	Rp12.500,00	Rp2.500,00	2023-01-18
6	johnson@gmail.com	Rp8.500,00	Rp1.700,00	2023-01-12

Figure 10. Query Result Case Number 10

Good Luck! 😊

Inspired by passion, driven by purpose, together we shatter limits and redefine boundaries
Bluejacket 23-2