DBMS PROJECT

LEV & MISSILE AERIAL DEFENCE

CUSTOMERS DEPARTMENT

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LEV & MISSILES

PRECISION, PROTECTION , GLOBAL SECURITY

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LEV & MISSILES

PRECISION, PROTECTION , GLOBAL SECURITY

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Not yet…

A LITTLE BIT ABOUT OUR COMPANY…

LEV & MISSILES

PRECISION, PROTECTION , GLOBAL SECURITY

“Lev&Missile Aerial Defence” is a cutting-edge company leading the marketplace in Aerial Defense & Missiles.

We specialize in cutting-edge missile systems and defense solutions, protecting nations and critical infrastructure worldwide.

Our products include advanced interceptors, radar systems, and command solutions, ensuring precision and peace of mind in airspace security.“

Our customers are always satisfied with our great quality and precision.

A LITTLE BIT ABOUT OUR COMPANY STRUCTURE

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Our company is comprised of four major departments: Production, Marketing, Human Resources, **and Customer Relations**. Each department includes at least six subdivisions that ensure the highest quality of work is achieved and maintained.

In this chapter, we will focus on the Customer Relations department and its associated entities.

CUSTOMERS DEPARTMENT ENTITIES

1) Customer

Attributes:

CustomerID: Unique customer identifier

Name: Country or project

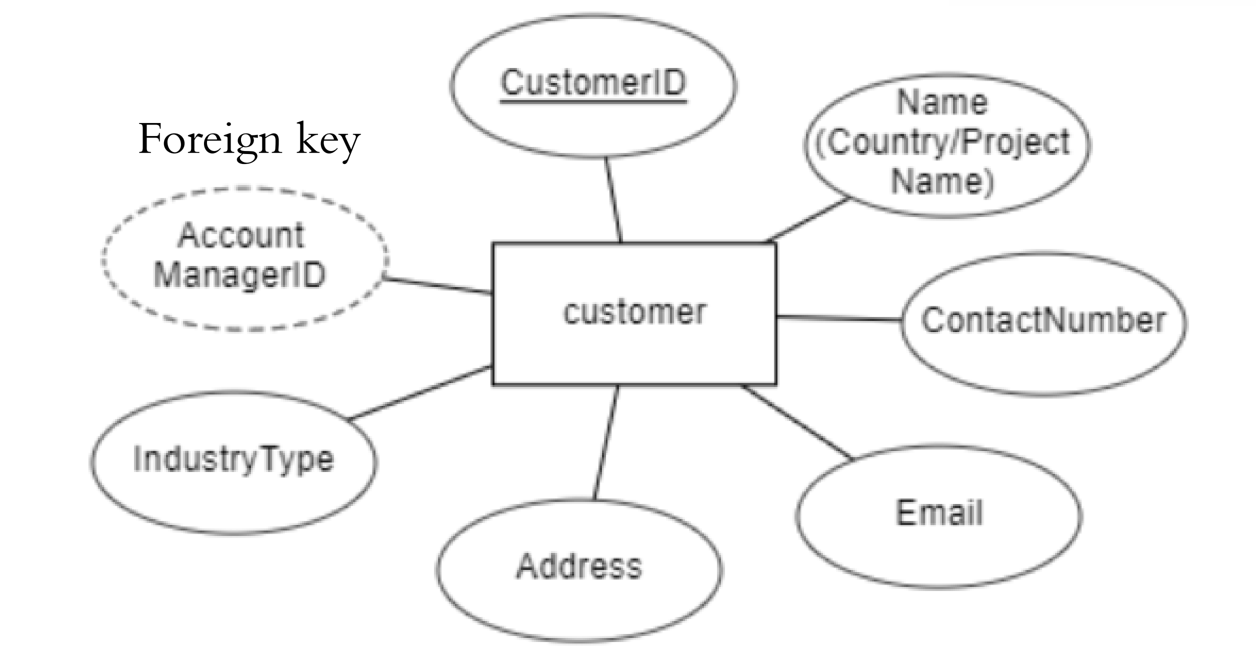
Contact Number: Customer's phone number

Email: Customer's email address

Address: Customer's physical location

IndustryType: Customer's business sector

AccountManagerID: Linked account manager



CUSTOMERS DEPARTMENT ENTITIES

2) Account Manager

Attributes:

AccountManagerID: Unique manager identifier

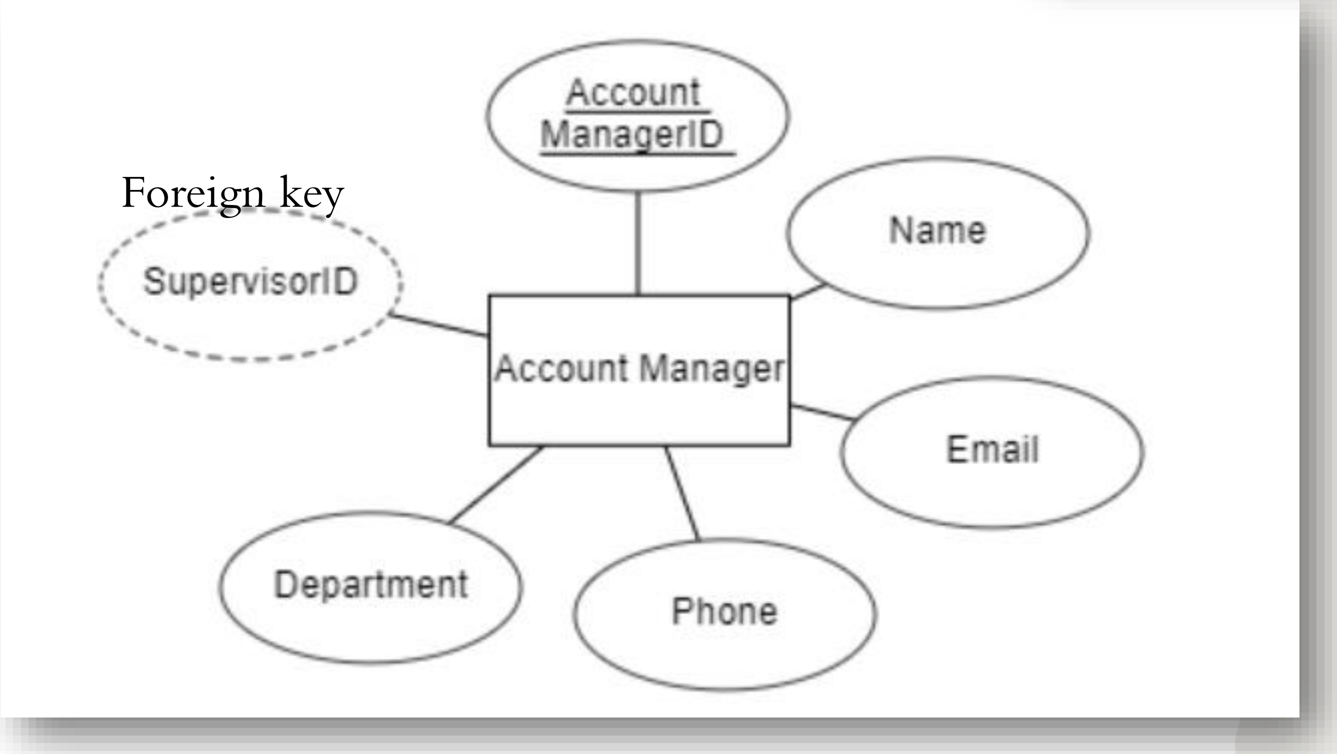
Name: Manager's full name

Email: Manager's email address

Phone: Manager's contact number

Department: Manager's assigned division

(SupervisorID: Linked supervisor identifier)-not included



CUSTOMERS DEPARTMENT ENTITIES

3)Order

Attributes:

OrderID: Unique order identifier

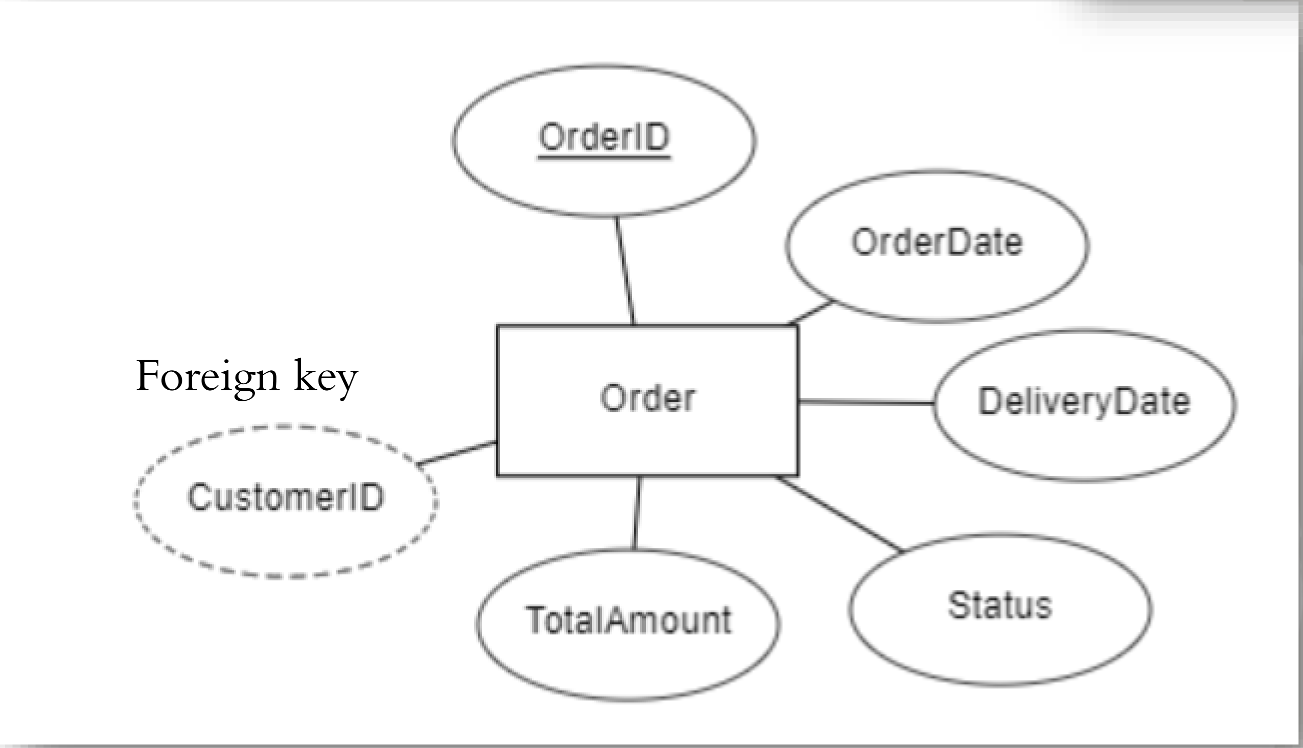
OrderDate: Date of order

DeliveryDate: Date of delivery

Status: Order current status

CustomerID: Linked customer identifier

TotalAmount: Order total cost



CUSTOMERS DEPARTMENT ENTITIES

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4) Product

Attributes:

ProductID: Unique product identifier

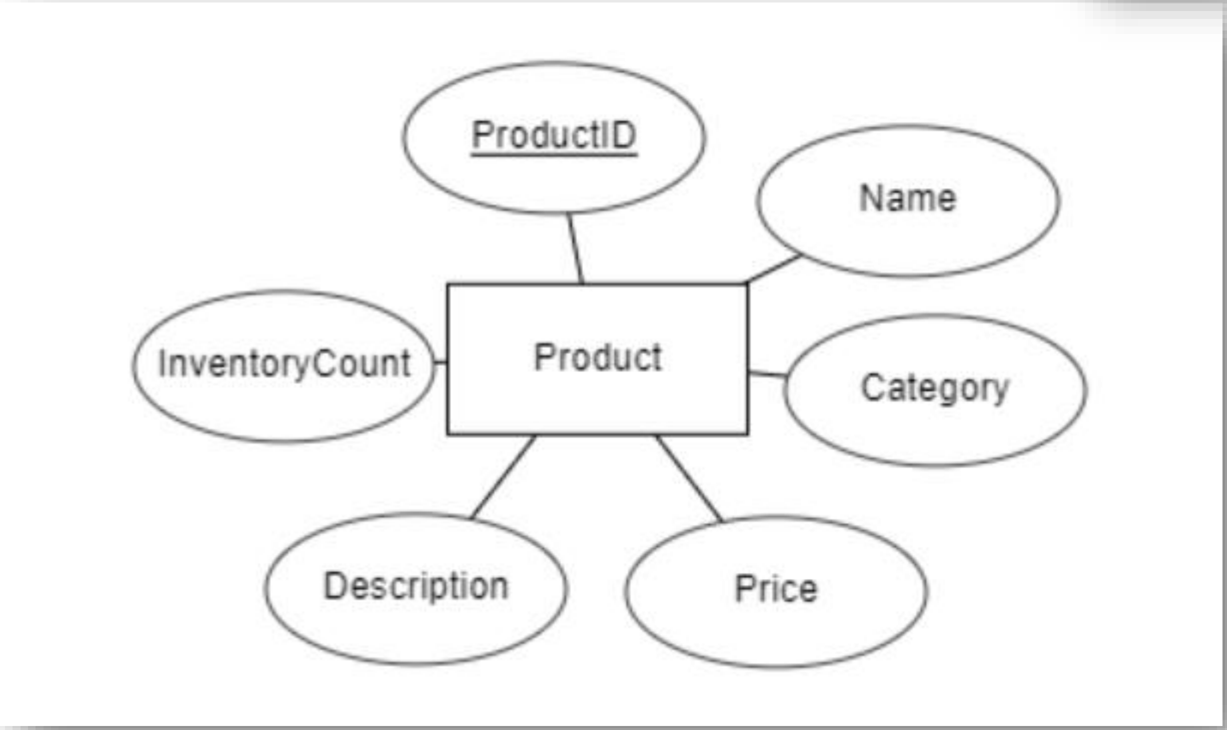
Name: Product's name

Category: Product's classification

Price: Product's selling price

Description: Product's detailed information

InventoryCount: Available product quantity



CUSTOMERS DEPARTMENT ENTITIES

5)Payment

Attributes:

Payment: Unique payment identifier

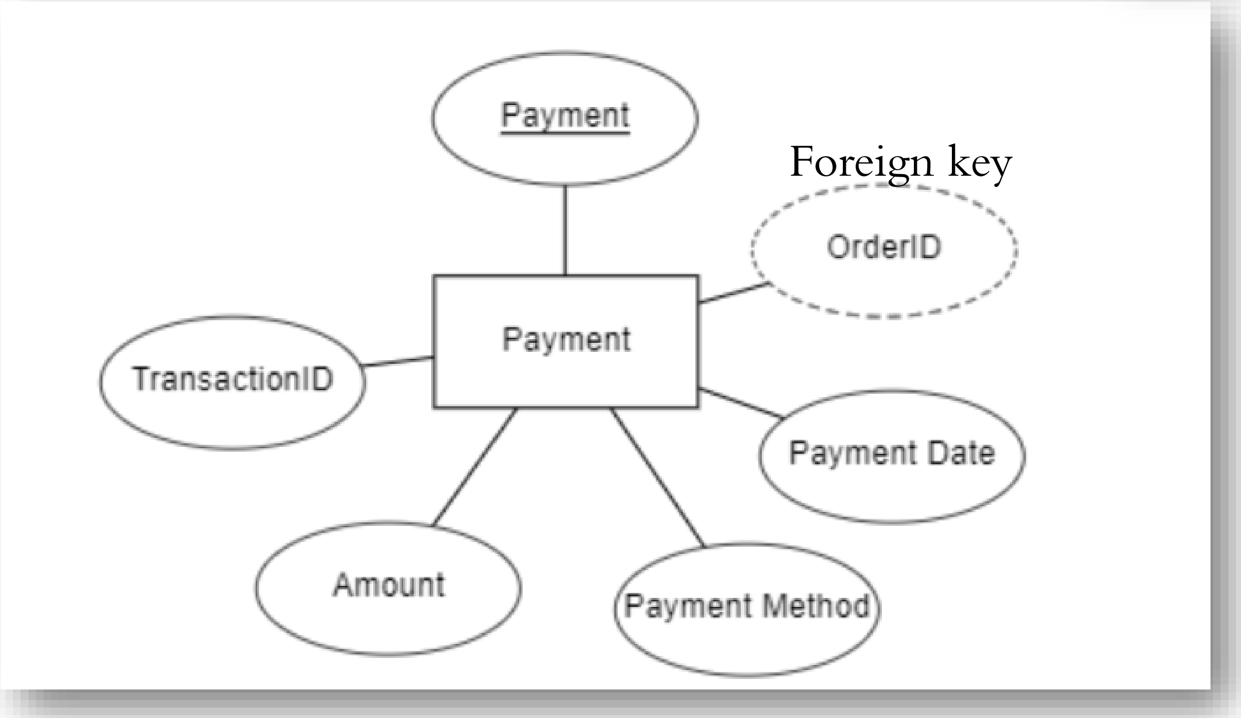
OrderID: Linked order identifier

Payment Date: Date of payment

Payment Method: Payment type used

Amount: Payment total amount

TransactionID: Payment transaction identifier



CUSTOMERS DEPARTMENT ENTITIES

6)Support Ticket

Attributes:

TicketID: Unique ticket identifier

CustomerID: Linked customer identifier

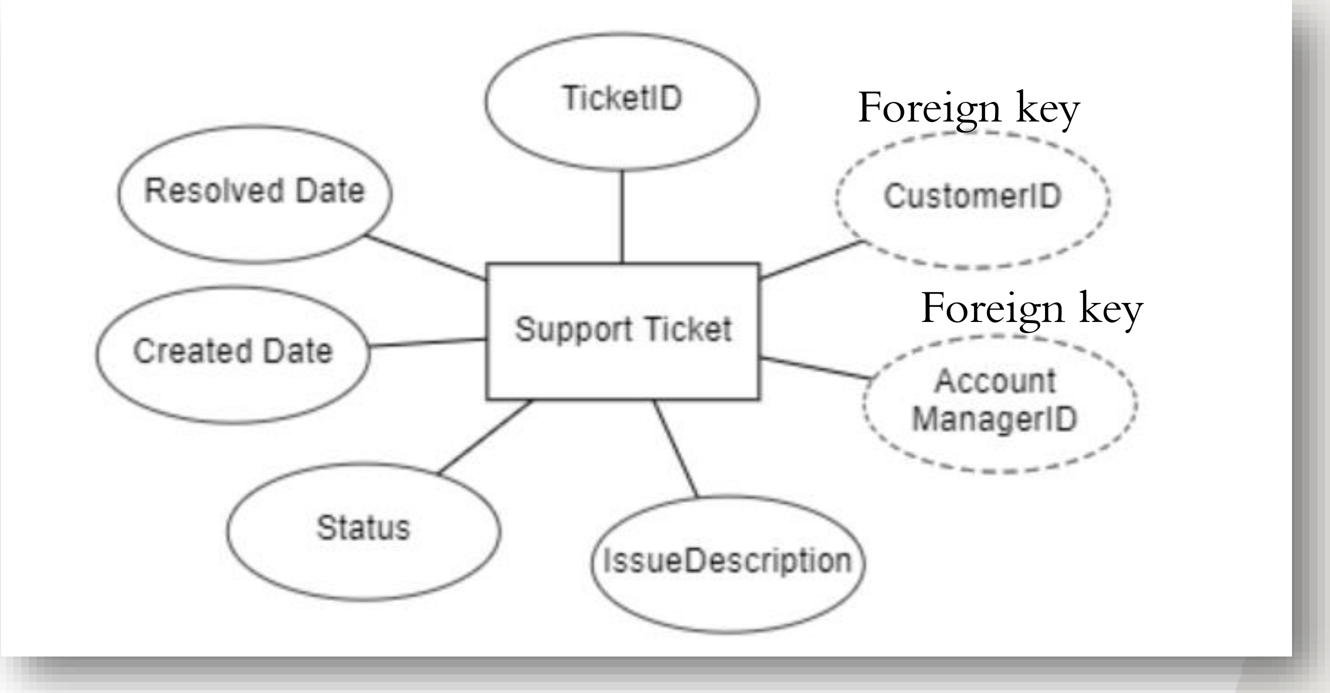
AccountManagerID: Linked manager identifier

IssueDescription: Problem details summary

Status: Current ticket state

Created Date: Ticket creation date

Resolved Date: Issue resolution date



CUSTOMERS DEPARTMENT RELATIONSHIPS

Relationships:
1)Customer - Account Manager:

Each Customer is assigned to one Account Manager.
One Account Manager can manage multiple Customers.
Relationship: **One-to-Many**

2) Customer - Order:

Each Customer can place multiple Orders.
Each Order is placed by one Customer.
Relationship: **One-to-Many**

3)Order - Product:

Each Order can contain multiple Products.
Each Product can be part of multiple Orders.
Relationship: **Many-to-Many**

4)Order - Payment:

Each Order can have multiple Payments.
Each Payment is associated with one Order.
Relationship: **One-to-Many**

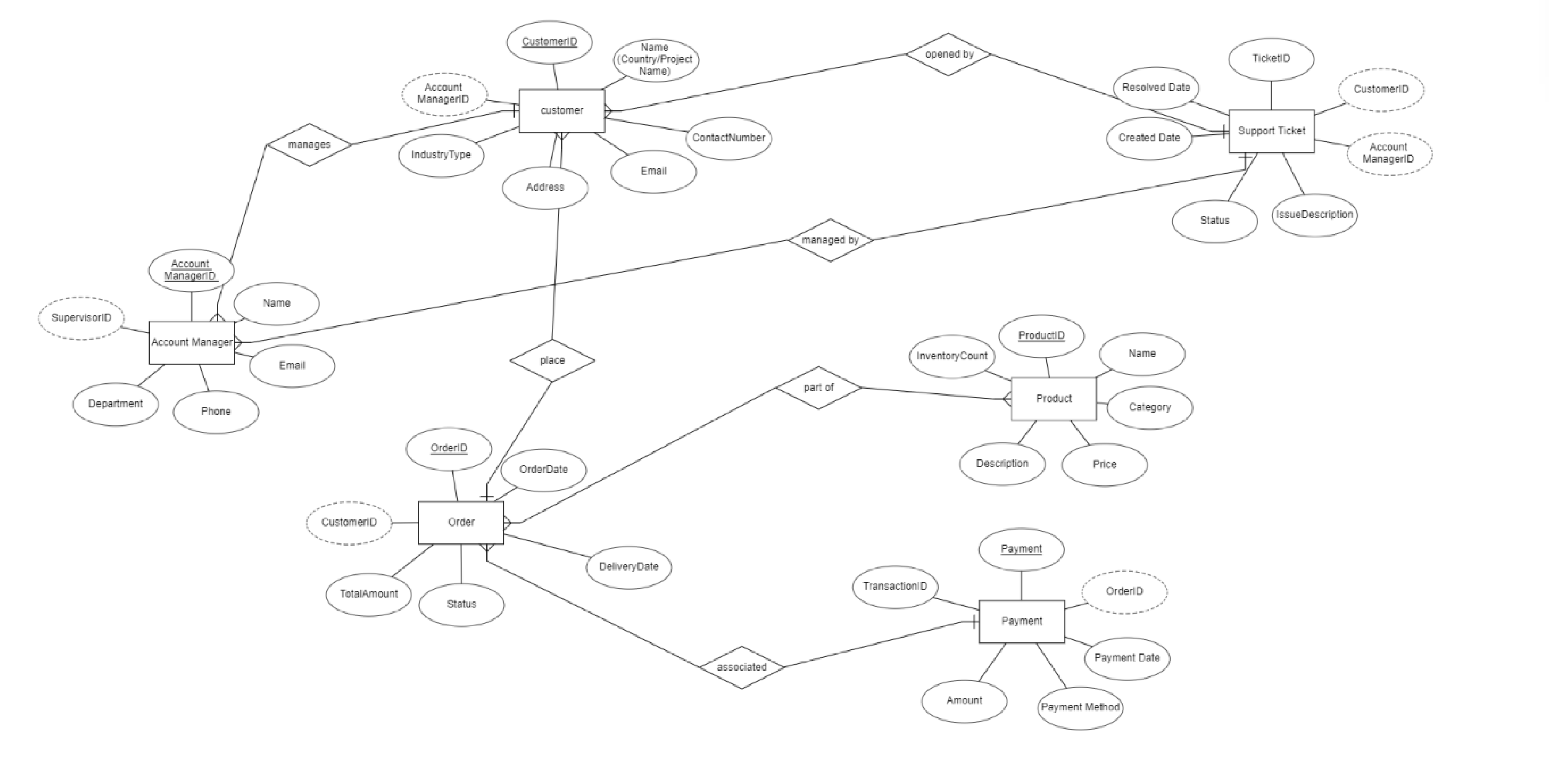
5)Customer - Support Ticket:

Each Customer can open multiple Support Tickets.
Each Support Ticket is opened by one Customer.
Relationship: **One-to-Many**

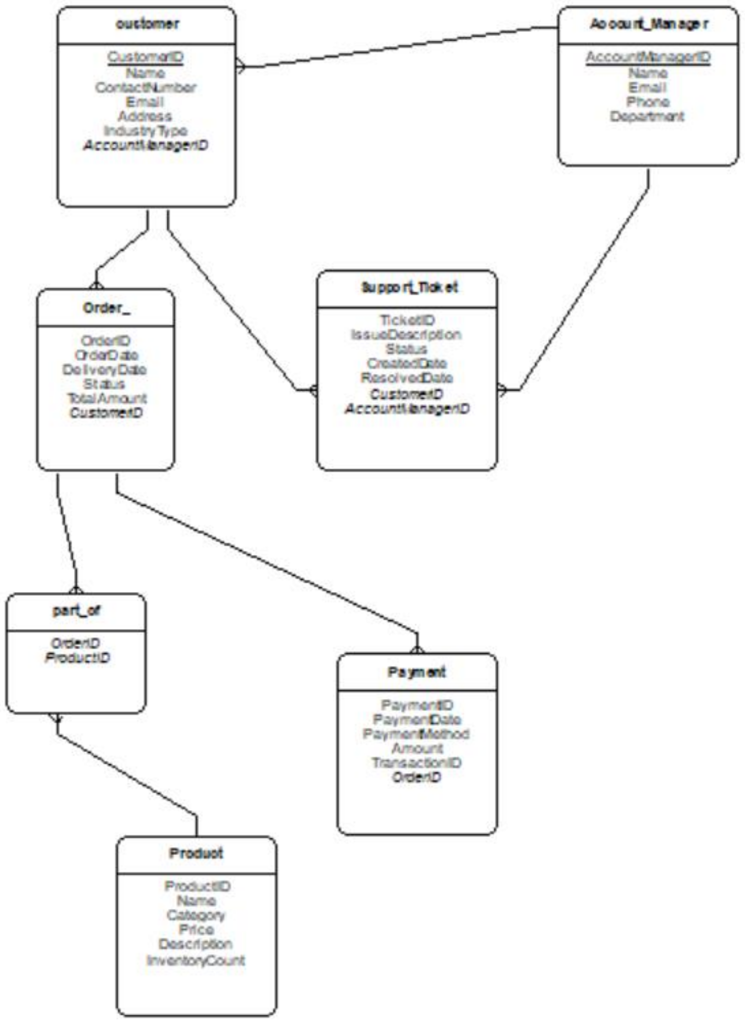
6)Account Manager - Support Ticket:

Each Support Ticket can be managed by one Account Manager.
One Account Manager can manage multiple Support Tickets.
Relationship: **One-to-Many**

CUSTOMERS DEPARTMENT RELATIONSHIPS



CUSTOMERS DEPARTMENT RELATIONSHIPS



customer
CustomerID
Name
ContactNumber
Email
Address
IndustryType
AccountManagerID

Account_Manager
AccountManagerID
Name
Email
Phone
Department

Order_
OrderID
OrderDate
DeliveryDate
Status
TotalAmount
CustomerID

Support_Ticket
TicketID
IssueDescription
Status
CreatedDate
ResolvedDate
CustomerID
AccountManagerID

part_of
OrderID
ProductID

Payment
PaymentID
PaymentDate
PaymentMethod
Amount
TransactionID
OrderID

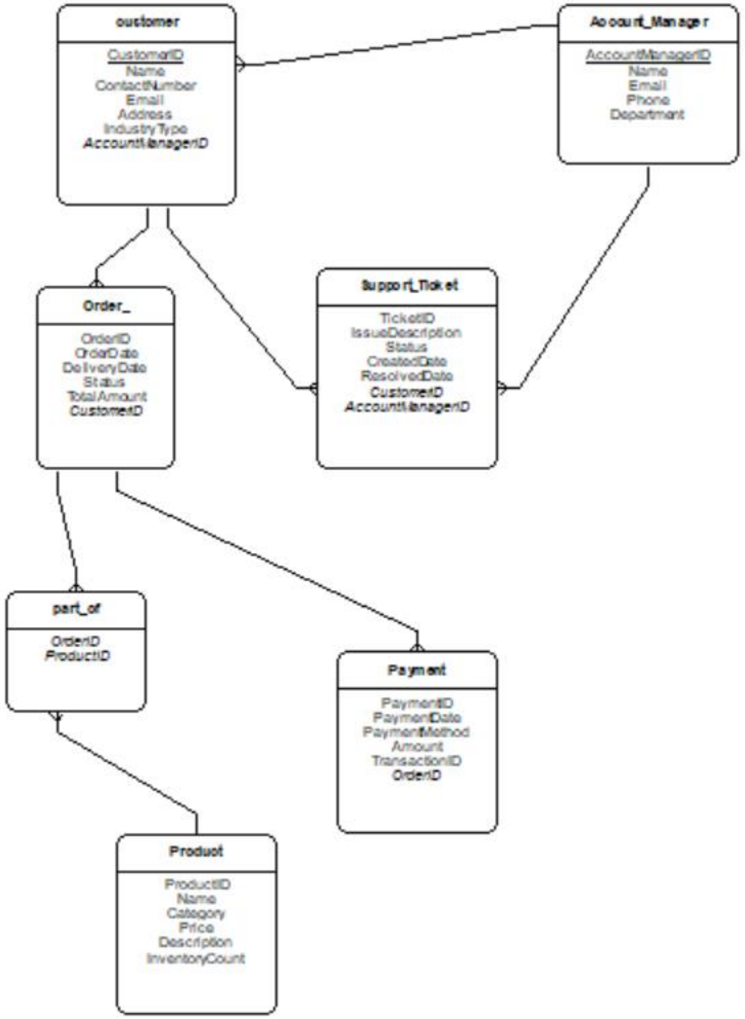
Product
ProductID
Name
Category
Price
Description
InventoryCount

Better view of the DSD file:
DSD VIEW

Summary:

Customer interacts with Account Manager, places Order, and can create Support Ticket.
Order includes Product and has related Payment.
Support Ticket is handled by Account Manager.
This structure covers the key components and interactions within the customer department of our aerial defense and missiles manufacturing company.

CUSTOMERS DEPARTMENT RELATIONSHIPS



3NF NORMALIZATION:

Each schema adheres to the rules of 3NF:
1NF: All attributes are atomic.
2NF: There are no partial dependencies
3NF: No transitive dependencies; every non-key attribute depends only on the primary key.

Ensuring that all attributes are dependent only on the primary key of their respective tables, with no transitive dependencies.This design effectively supports the requirements of the DBMS project.

SQL CODE: CREATE TABLES

1

```
CREATE TABLE Account_Manager ( AccountManagerID NUMBER(38)
NOT NULL, Name VARCHAR2(255) NOT NULL, Email VARCHAR2(255)
NOT NULL, Phone VARCHAR2(20) NOT NULL, Department
VARCHAR2(255) NOT NULL, CONSTRAINT pk_Account_Manager
PRIMARY KEY (AccountManagerID) ) /
```

2

```
CREATE TABLE Product ( ProductID NUMBER(38) NOT NULL, Name
VARCHAR2(255) NOT NULL, Category VARCHAR2(255) NOT NULL,
Price NUMBER(10, 2) NOT NULL, Description VARCHAR2(4000)
NOT NULL, InventoryCount NUMBER(38) NOT NULL, CONSTRAINT
pk_Product PRIMARY KEY (ProductID) ) /
```

3

```
CREATE TABLE Customer ( CustomerID NUMBER(38) NOT NULL,
Name VARCHAR2(255) NOT NULL, ContactNumber VARCHAR2(20)
NOT NULL, Email VARCHAR2(255) NOT NULL, Address
VARCHAR2(4000) NOT NULL, IndustryType VARCHAR2(255) NOT
NULL, AccountManagerID NUMBER(38) NOT NULL, CONSTRAINT
pk_Customer PRIMARY KEY (CustomerID), CONSTRAINT
fk_Customer FOREIGN KEY (AccountManagerID) REFERENCES
Account_Manager (AccountManagerID) ON DELETE CASCADE ) /
```

4

```
CREATE TABLE Order_ ( OrderID NUMBER(38) NOT NULL,
OrderDate DATE NOT NULL, DeliveryDate DATE NOT NULL,
Status VARCHAR2(50) NOT NULL, TotalAmount NUMBER(10, 2)
NOT NULL, CustomerID NUMBER(38), CONSTRAINT pk_Order_
PRIMARY KEY (OrderID), CONSTRAINT fk_Order_ FOREIGN KEY
(CustomerID) REFERENCES Customer (CustomerID) ) / -- --
```

Full code+documentation

5

```
CREATE TABLE Payment ( PaymentID NUMBER(38) NOT NULL,
PaymentDate DATE NOT NULL, PaymentMethod VARCHAR2(50) NOT
NULL, Amount NUMBER(10, 2) NOT NULL, TransactionID
VARCHAR2(50) NOT NULL, OrderID NUMBER(38), CONSTRAINT
pk_Payment PRIMARY KEY (PaymentID), CONSTRAINT fk_Payment
FOREIGN KEY (OrderID) REFERENCES Order_ (OrderID) ) /
```

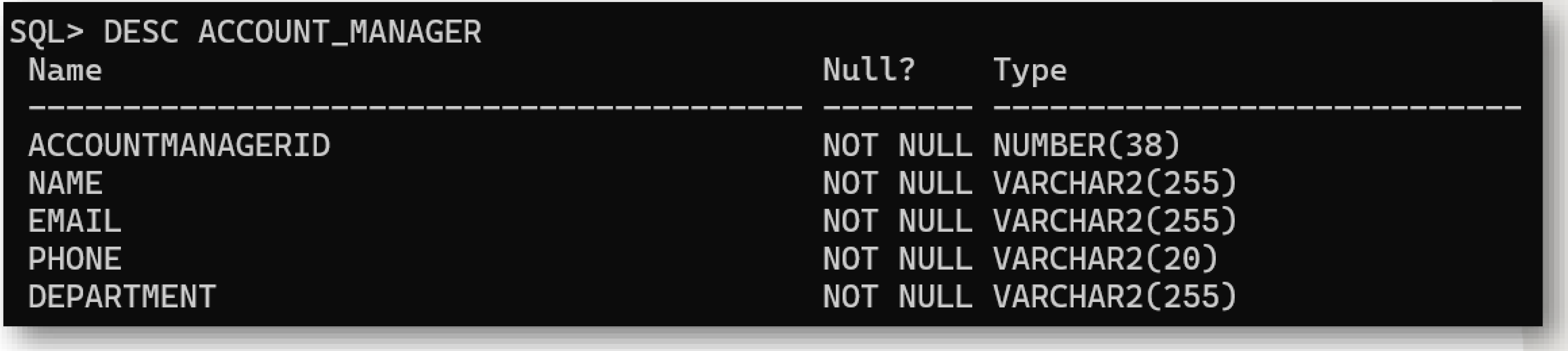
6

```
CREATE TABLE Support_Ticket ( TicketID NUMBER(38) NOT
NULL, IssueDescription VARCHAR2(4000) NOT NULL, Status
VARCHAR2(50) NOT NULL, CreatedDate DATE NOT NULL,
ResolvedDate DATE, CustomerID NUMBER(38), AccountManagerID
NUMBER(38), CONSTRAINT pk_Support_Ticket PRIMARY KEY
(TicketID), CONSTRAINT fk_Support_Ticket FOREIGN KEY
(CustomerID) REFERENCES Customer (CustomerID), CONSTRAINT
fk_Support_Ticket2 FOREIGN KEY (AccountManagerID)
REFERENCES Account_Manager (AccountManagerID) ) /
```

7

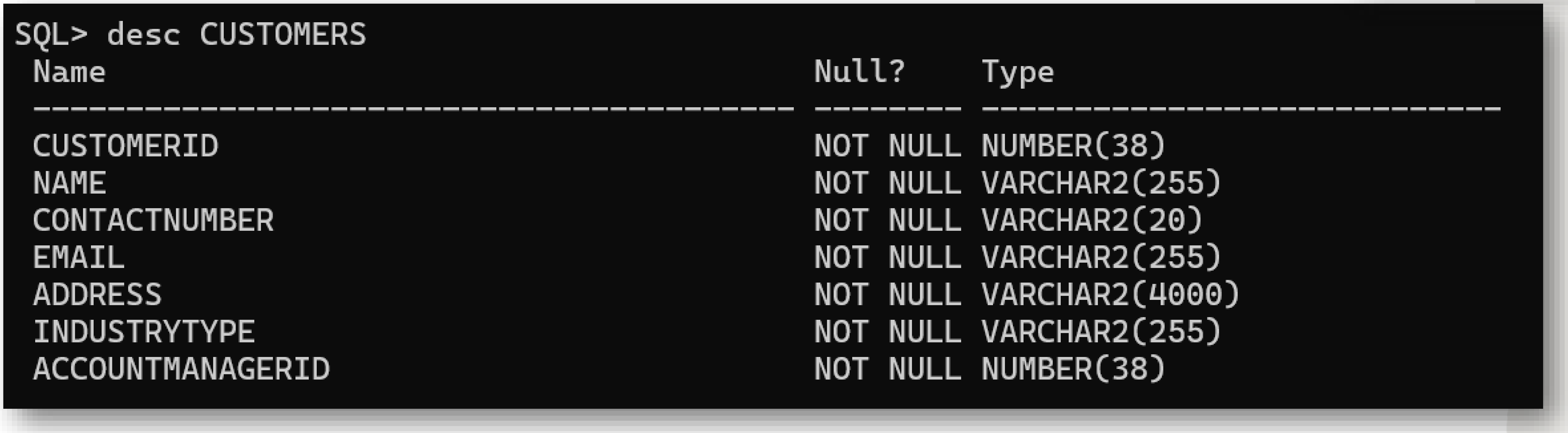
```
CREATE TABLE part_of ( OrderID NUMBER(38) NOT NULL,
ProductID NUMBER(38) NOT NULL, CONSTRAINT pk_part_of
PRIMARY KEY (OrderID, ProductID), CONSTRAINT fk_part_of
FOREIGN KEY (OrderID) REFERENCES Order_ (OrderID) ON
DELETE CASCADE, CONSTRAINT fk_part_of2 FOREIGN KEY
(ProductID) REFERENCES Product (ProductID) )/
```

CUSTOMERS DEPARTMENT RELATIONSHIPS



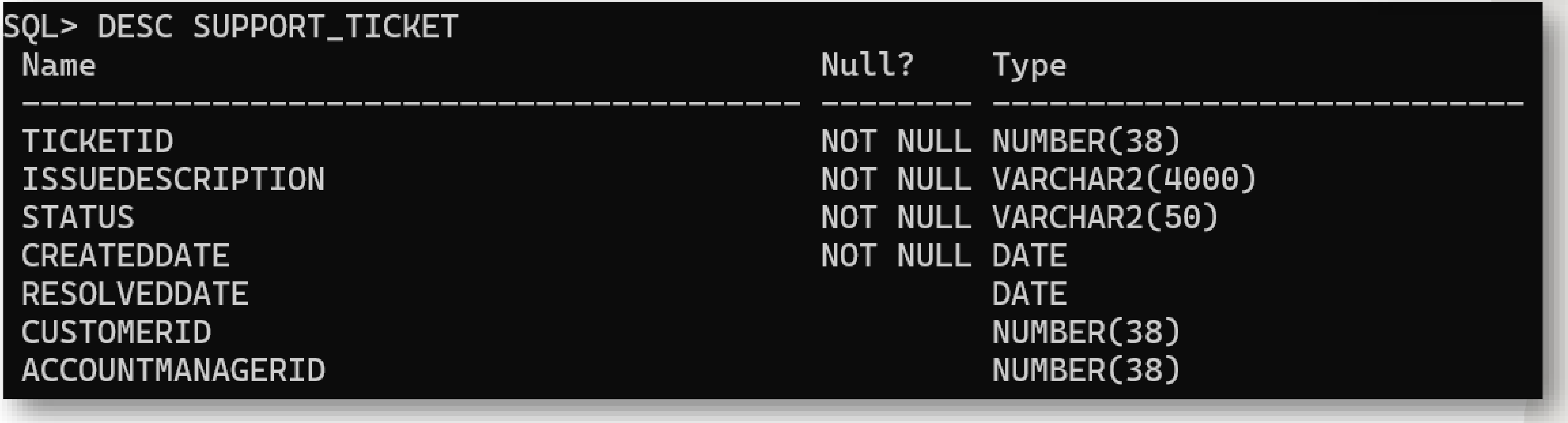
```
SQL> DESC ACCOUNT_MANAGER
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 ACCOUNTMANAGERID                          NOT NULL NUMBER(38)
 NAME                                      NOT NULL VARCHAR2(255)
 EMAIL                                     NOT NULL VARCHAR2(255)
 PHONE                                     NOT NULL VARCHAR2(20)
 DEPARTMENT                                NOT NULL VARCHAR2(255)
```

CUSTOMERS DEPARTMENT RELATIONSHIPS



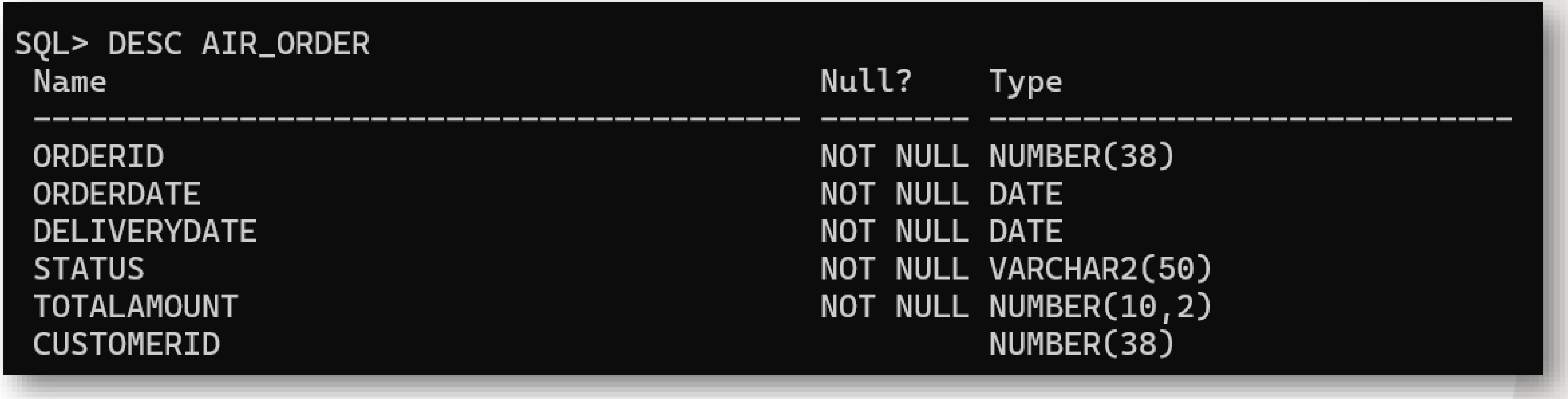
```
SQL> desc CUSTOMERS
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 CUSTOMERID                                NOT NULL NUMBER(38)
 NAME                                      NOT NULL VARCHAR2(255)
 CONTACTNUMBER                             NOT NULL VARCHAR2(20)
 EMAIL                                     NOT NULL VARCHAR2(255)
 ADDRESS                                   NOT NULL VARCHAR2(4000)
 INDUSTRYTYPE                              NOT NULL VARCHAR2(255)
 ACCOUNTMANAGERID                          NOT NULL NUMBER(38)
```

CUSTOMERS DEPARTMENT RELATIONSHIPS



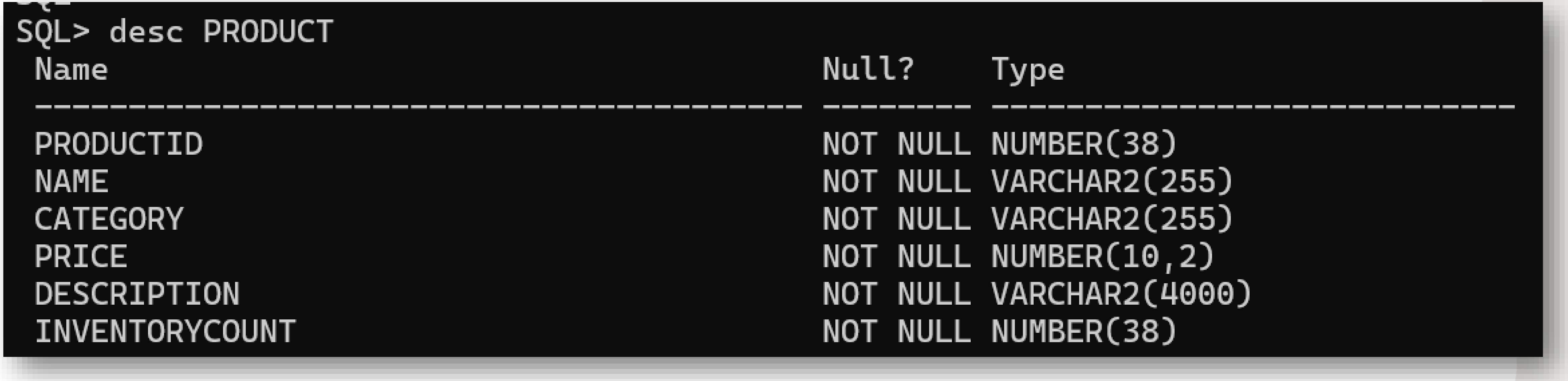
```
SQL> DESC SUPPORT_TICKET
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 TICKETID                                  NOT NULL NUMBER(38)
 ISSUEDESCRIPTION                          NOT NULL VARCHAR2(4000)
 STATUS                                    NOT NULL VARCHAR2(50)
 CREATEDDATE                               NOT NULL DATE
 RESOLVEDDATE                                       DATE
 CUSTOMERID                                         NUMBER(38)
 ACCOUNTMANAGERID                                   NUMBER(38)
```

CUSTOMERS DEPARTMENT RELATIONSHIPS



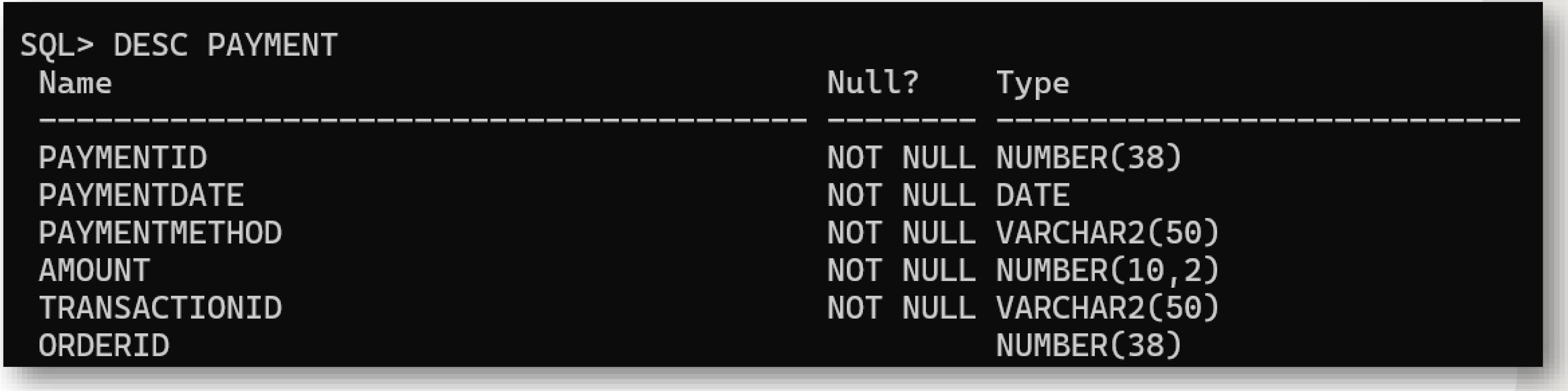
```
SQL> DESC AIR_ORDER
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 ORDERID                                   NOT NULL NUMBER(38)
 ORDERDATE                                 NOT NULL DATE
 DELIVERYDATE                              NOT NULL DATE
 STATUS                                    NOT NULL VARCHAR2(50)
 TOTALAMOUNT                               NOT NULL NUMBER(10,2)
 CUSTOMERID                                         NUMBER(38)
```

CUSTOMERS DEPARTMENT RELATIONSHIPS



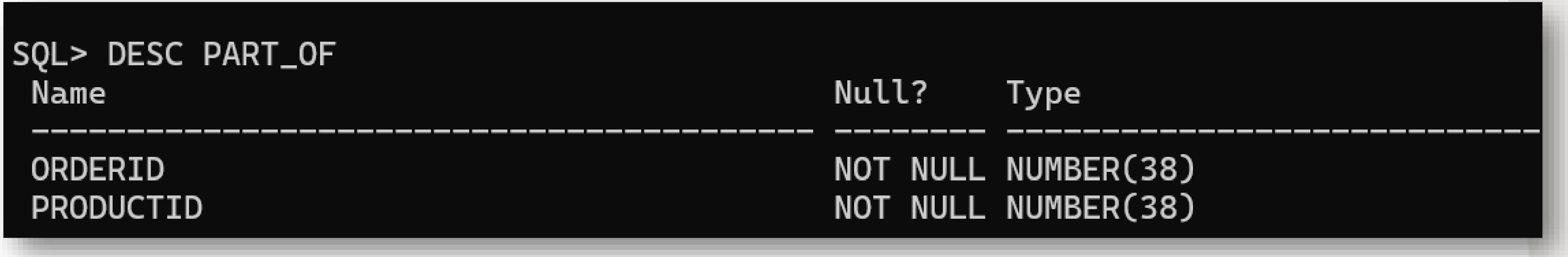
```
SQL> desc PRODUCT
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 PRODUCTID                                 NOT NULL NUMBER(38)
 NAME                                      NOT NULL VARCHAR2(255)
 CATEGORY                                  NOT NULL VARCHAR2(255)
 PRICE                                     NOT NULL NUMBER(10,2)
 DESCRIPTION                               NOT NULL VARCHAR2(4000)
 INVENTORYCOUNT                            NOT NULL NUMBER(38)
```

CUSTOMERS DEPARTMENT RELATIONSHIPS



```
SQL> DESC PAYMENT
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 PAYMENTID                                 NOT NULL NUMBER(38)
 PAYMENTDATE                               NOT NULL DATE
 PAYMENTMETHOD                             NOT NULL VARCHAR2(50)
 AMOUNT                                    NOT NULL NUMBER(10,2)
 TRANSACTIONID                             NOT NULL VARCHAR2(50)
 ORDERID                                            NUMBER(38)
```

CUSTOMERS DEPARTMENT RELATIONSHIPS



```
SQL> DESC PART_OF
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 ORDERID                                   NOT NULL NUMBER(38)
 PRODUCTID                                 NOT NULL NUMBER(38)
```

CREATE TABLES : REALIZATION IN PL/SQL

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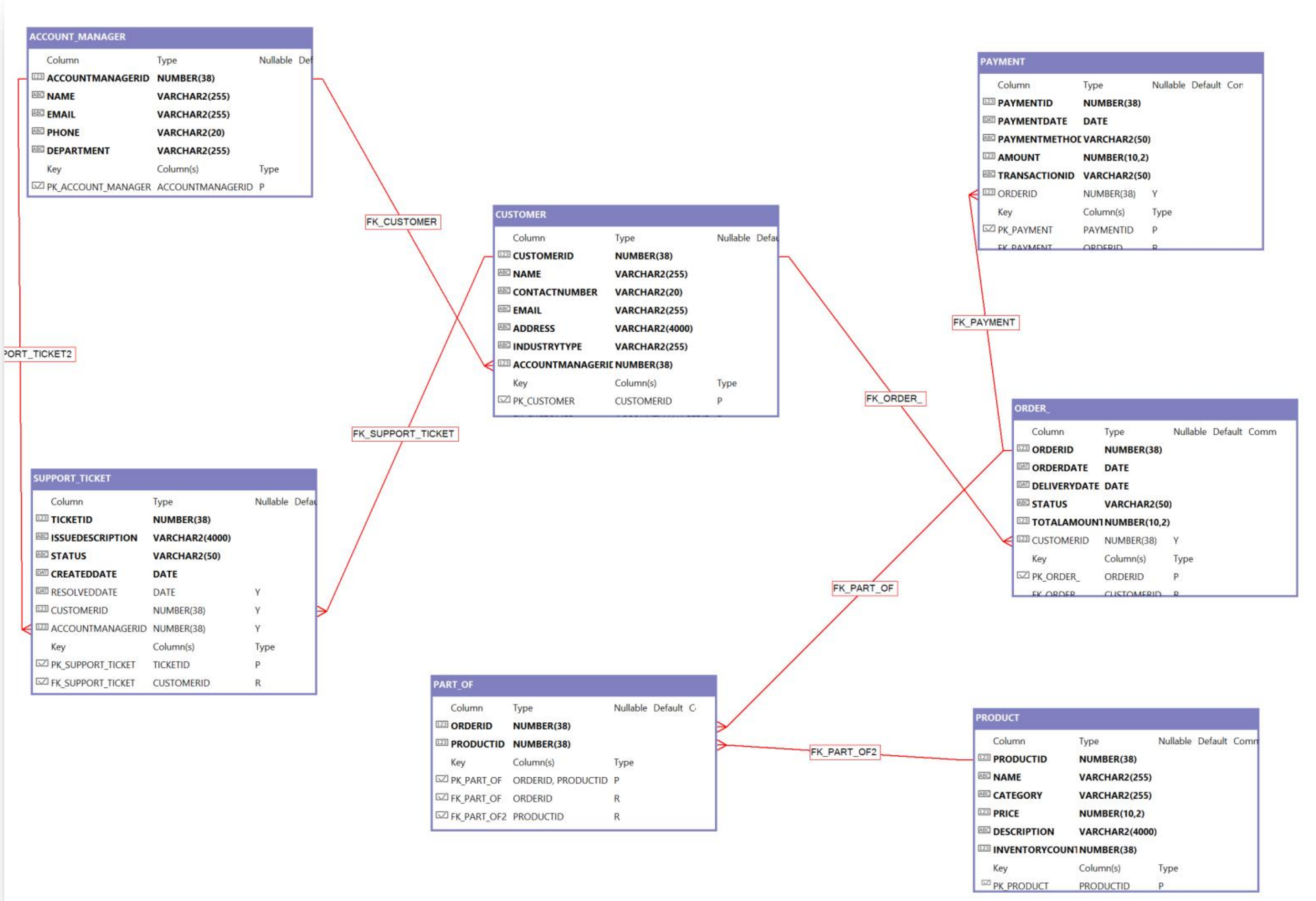


ACCOUNT_MANAGER

Column	Type	Nullable	Def
ACCOUNTMANAGERID	NUMBER(38)		
NAME	VARCHAR2(255)		
EMAIL	VARCHAR2(255)		
PHONE	VARCHAR2(20)		
DEPARTMENT	VARCHAR2(255)		
Key	Column(s)	Type	
PK_ACCOUNT_MANAGER	ACCOUNTMANAGERID	P	

CUSTOMER

Column	Type	Nullable	Defau
CUSTOMERID	NUMBER(38)		
NAME	VARCHAR2(255)		
CONTACTNUMBER	VARCHAR2(20)		
EMAIL	VARCHAR2(255)		
ADDRESS	VARCHAR2(4000)		
INDUSTRYTYPE	VARCHAR2(255)		
ACCOUNTMANAGERIL	NUMBER(38)		
Key	Column(s)	Type	
PK_CUSTOMER	CUSTOMERID	P	

PAYMENT

Column	Type	Nullable	Default	Cor
PAYMENTID	NUMBER(38)			
PAYMENTDATE	DATE			
PAYMENTMETHOL	VARCHAR2(50)			
AMOUNT	NUMBER(10,2)			
TRANSACTIONID	VARCHAR2(50)			
ORDERID	NUMBER(38)	Y		
Key	Column(s)	Type		
PK_PAYMENT	PAYMENTID	P		
FK_PAYMENT	ORDERID	R		

SUPPORT_TICKET

Column	Type	Nullable	Defau
TICKETID	NUMBER(38)		
ISSUEDESCRIPTION	VARCHAR2(4000)		
STATUS	VARCHAR2(50)		
CREATEDDATE	DATE		
RESOLVEDDATE	DATE	Y	
CUSTOMERID	NUMBER(38)	Y	
ACCOUNTMANAGERID	NUMBER(38)	Y	
Key	Column(s)	Type	
PK_SUPPORT_TICKET	TICKETID	P	
FK_SUPPORT_TICKET	CUSTOMERID	R	

ORDER_

Column	Type	Nullable	Default	Comm
ORDERID	NUMBER(38)			
ORDERDATE	DATE			
DELIVERYDATE	DATE			
STATUS	VARCHAR2(50)			
TOTALAMOUNT	NUMBER(10,2)			
CUSTOMERID	NUMBER(38)	Y		
Key	Column(s)	Type		
PK_ORDER_	ORDERID	P		
FK_ORDER	CUSTOMERID	R		

PART_OF

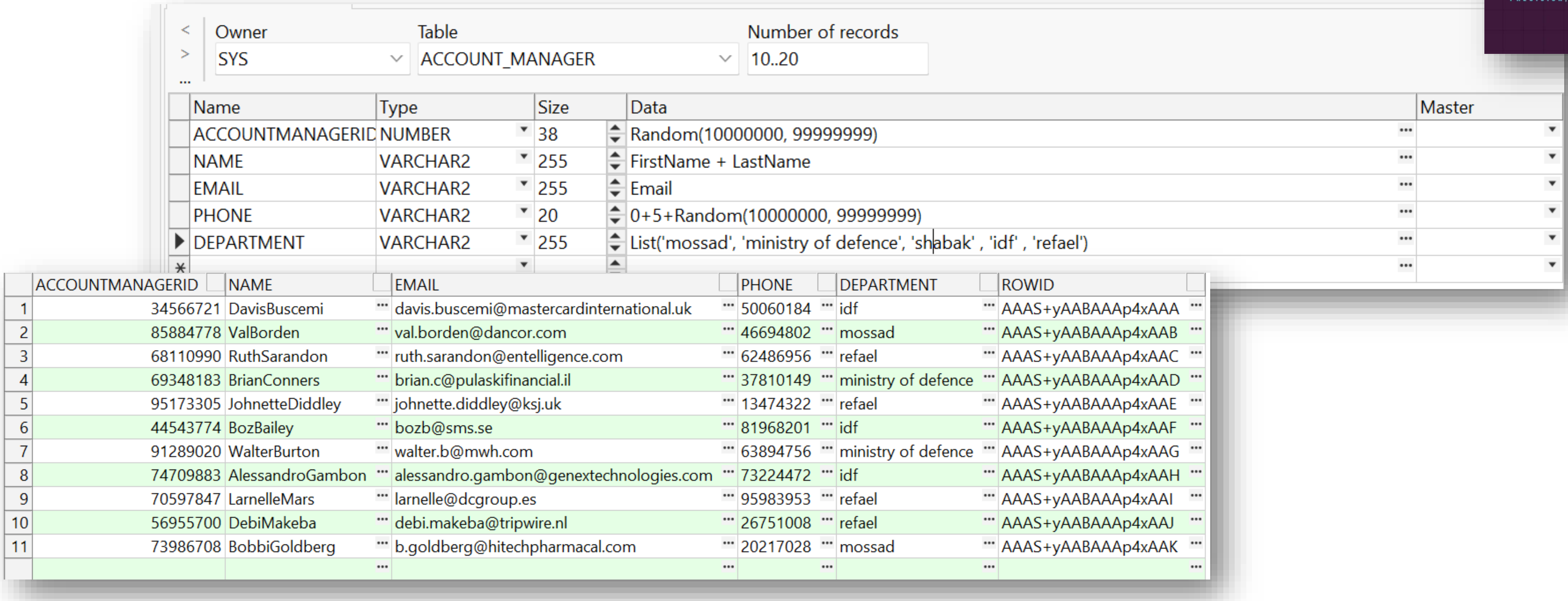
Column	Type	Nullable	Default	C
ORDERID	NUMBER(38)			
PRODUCTID	NUMBER(38)			
Key	Column(s)	Type		
PK_PART_OF	ORDERID, PRODUCTID	P		
FK_PART_OF	ORDERID	R		
FK_PART_OF2	PRODUCTID	R		

PRODUCT

Column	Type	Nullable	Default	Comm
PRODUCTID	NUMBER(38)			
NAME	VARCHAR2(255)			
CATEGORY	VARCHAR2(255)			
PRICE	NUMBER(10,2)			
DESCRIPTION	VARCHAR2(4000)			
INVENTORYCOUNT	NUMBER(38)			
Key	Column(s)	Type		
PK_PRODUCT	PRODUCTID	P		

Better view of the Diagram: TABLES

DATA GENERATOR: ACCOUNT MANAGER



Owner: SYS

Table: ACCOUNT_MANAGER

Number of records: 10..20

Name	Type	Size	Data	Master
ACCOUNTMANAGERID	NUMBER	38	Random(10000000, 99999999)	
NAME	VARCHAR2	255	FirstName + LastName	
EMAIL	VARCHAR2	255	Email	
PHONE	VARCHAR2	20	0+5+Random(10000000, 99999999)	
DEPARTMENT	VARCHAR2	255	List('mossad', 'ministry of defence', 'shabak' , 'idf' , 'refael')	

	ACCOUNTMANAGERID	NAME	EMAIL	PHONE	DEPARTMENT	ROWID
1	34566721	DavisBuscemi	davis.buscemi@mastercardinternational.uk	50060184	idf	AAAS+yAABAAAp4xAAA
2	85884778	ValBorden	val.borden@dancor.com	46694802	mossad	AAAS+yAABAAAp4xAAB
3	68110990	RuthSarandon	ruth.sarandon@entelligence.com	62486956	refael	AAAS+yAABAAAp4xAAC
4	69348183	BrianConners	brian.c@pulaskifinancial.il	37810149	ministry of defence	AAAS+yAABAAAp4xAAD
5	95173305	JohnetteDiddley	johnette.diddley@ksj.uk	13474322	refael	AAAS+yAABAAAp4xAAE
6	44543774	BozBailey	bozb@sms.se	81968201	idf	AAAS+yAABAAAp4xAAF
7	91289020	WalterBurton	walter.b@mwh.com	63894756	ministry of defence	AAAS+yAABAAAp4xAAG
8	74709883	AlessandroGambon	alessandro.gambon@genextechnologies.com	73224472	idf	AAAS+yAABAAAp4xAAH
9	70597847	LarnelleMars	larnelle@dcgroup.es	95983953	refael	AAAS+yAABAAAp4xAAI
10	56955700	DebiMakeba	debi.makeba@tripwire.nl	26751008	refael	AAAS+yAABAAAp4xAAJ
11	73986708	BobbiGoldberg	b.goldberg@hitechpharmacal.com	20217028	mossad	AAAS+yAABAAAp4xAAK

DATA GENERATOR: CUSTOMER

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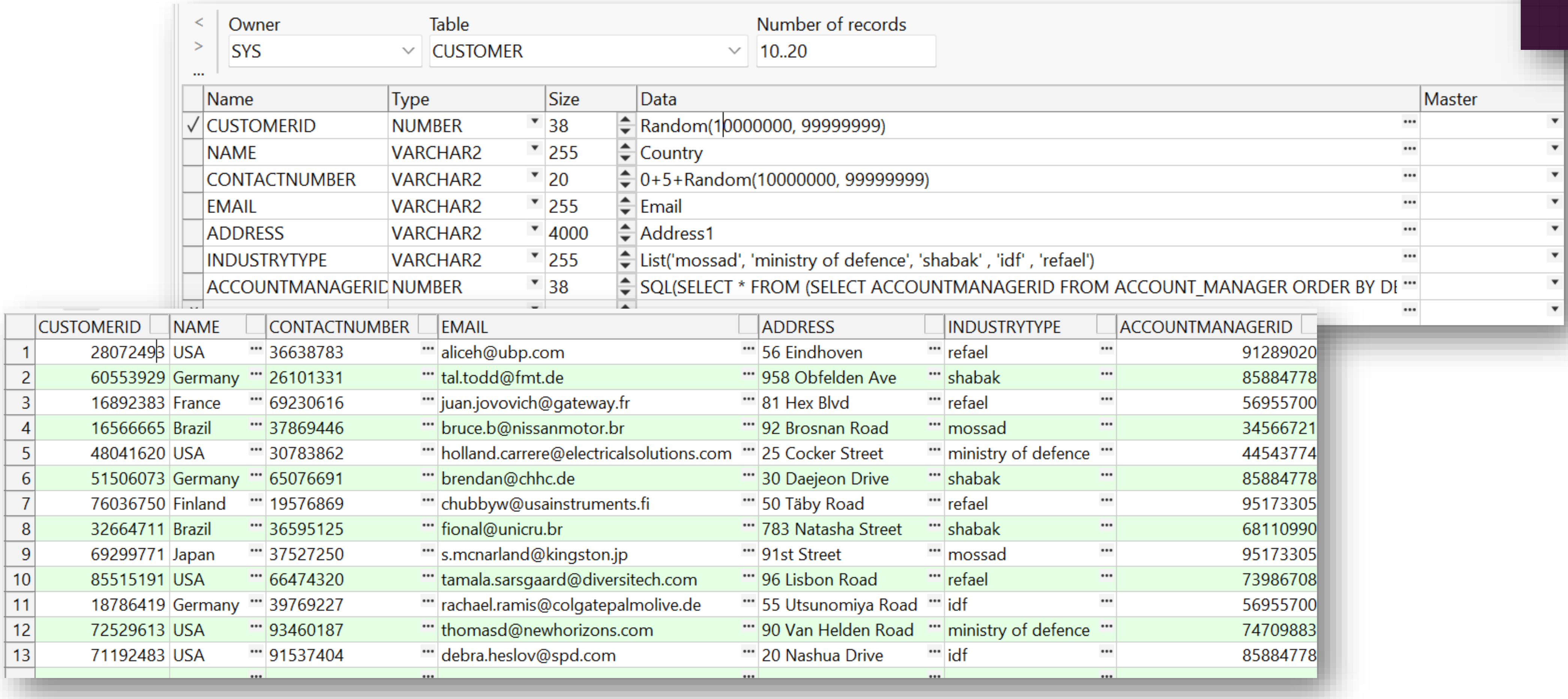


Owner: SYS

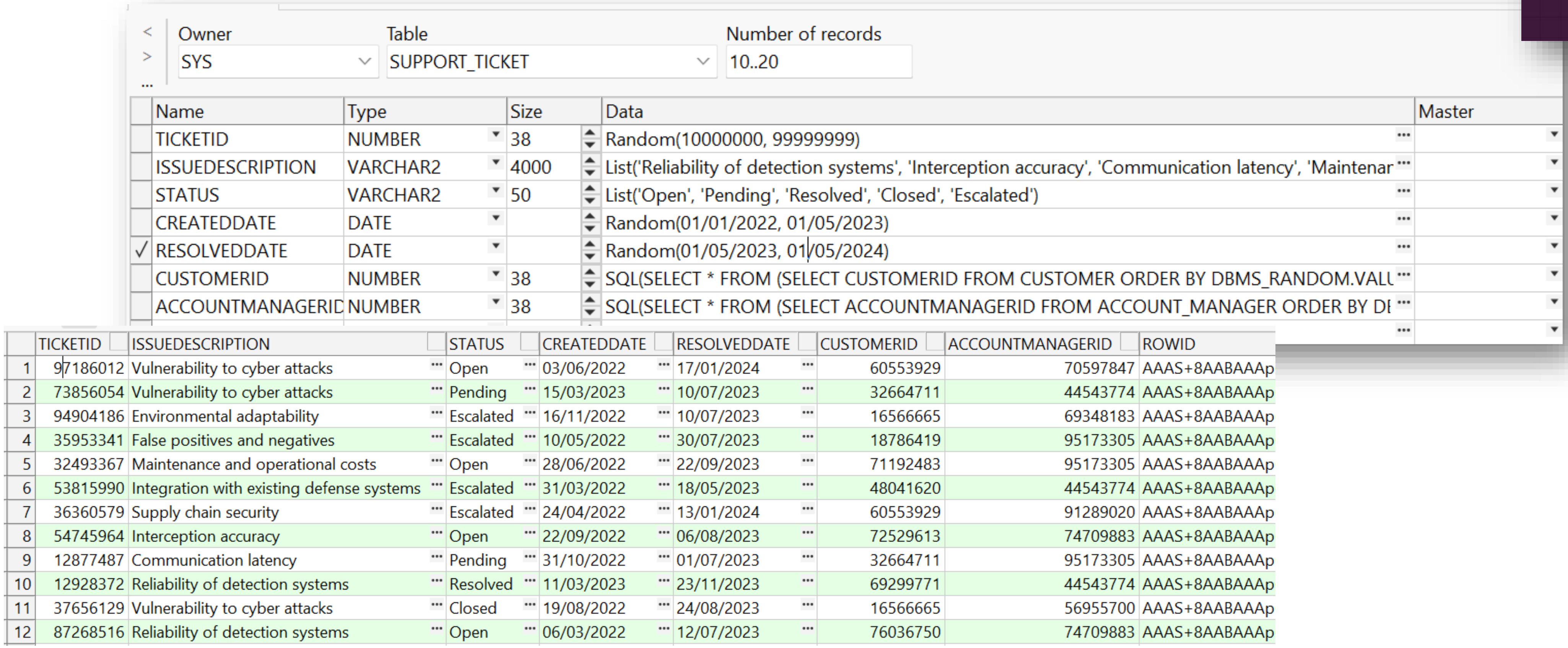
Table: CUSTOMER

Number of records: 10..20

	Name	Type	Size	Data	Master
✓	CUSTOMERID	NUMBER	38	Random(10000000, 99999999)	
	NAME	VARCHAR2	255	Country	
	CONTACTNUMBER	VARCHAR2	20	0+5+Random(10000000, 99999999)	
	EMAIL	VARCHAR2	255	Email	
	ADDRESS	VARCHAR2	4000	Address1	
	INDUSTRYTYPE	VARCHAR2	255	List('mossad', 'ministry of defence', 'shabak' , 'idf' , 'refael')	
	ACCOUNTMANAGERID	NUMBER	38	SQL(SELECT * FROM (SELECT ACCOUNTMANAGERID FROM ACCOUNT_MANAGER ORDER BY DI	

	CUSTOMERID	NAME	CONTACTNUMBER	EMAIL	ADDRESS	INDUSTRYTYPE	ACCOUNTMANAGERID
1	28072493	USA	36638783	aliceh@ubp.com	56 Eindhoven	refael	91289020
2	60553929	Germany	26101331	tal.todd@fmt.de	958 Obfelden Ave	shabak	85884778
3	16892383	France	69230616	juan.jovovich@gateway.fr	81 Hex Blvd	refael	56955700
4	16566665	Brazil	37869446	bruce.b@nissanmotor.br	92 Brosnan Road	mossad	34566721
5	48041620	USA	30783862	holland.carrere@electricalsolutions.com	25 Cocker Street	ministry of defence	44543774
6	51506073	Germany	65076691	brendan@chhc.de	30 Daejeon Drive	shabak	85884778
7	76036750	Finland	19576869	chubbyw@usainstruments.fi	50 Täby Road	refael	95173305
8	32664711	Brazil	36595125	fional@unicru.br	783 Natasha Street	shabak	68110990
9	69299771	Japan	37527250	s.mcnarland@kingston.jp	91st Street	mossad	95173305
10	85515191	USA	66474320	tamala.sarsgaard@diversitech.com	96 Lisbon Road	refael	73986708
11	18786419	Germany	39769227	rachael.ramis@colgatepalmolive.de	55 Utsunomiya Road	idf	56955700
12	72529613	USA	93460187	thomasd@newhorizons.com	90 Van Helden Road	ministry of defence	74709883
13	71192483	USA	91537404	debra.heslov@spd.com	20 Nashua Drive	idf	85884778

DATA GENERATOR: SUPPORT TICKET

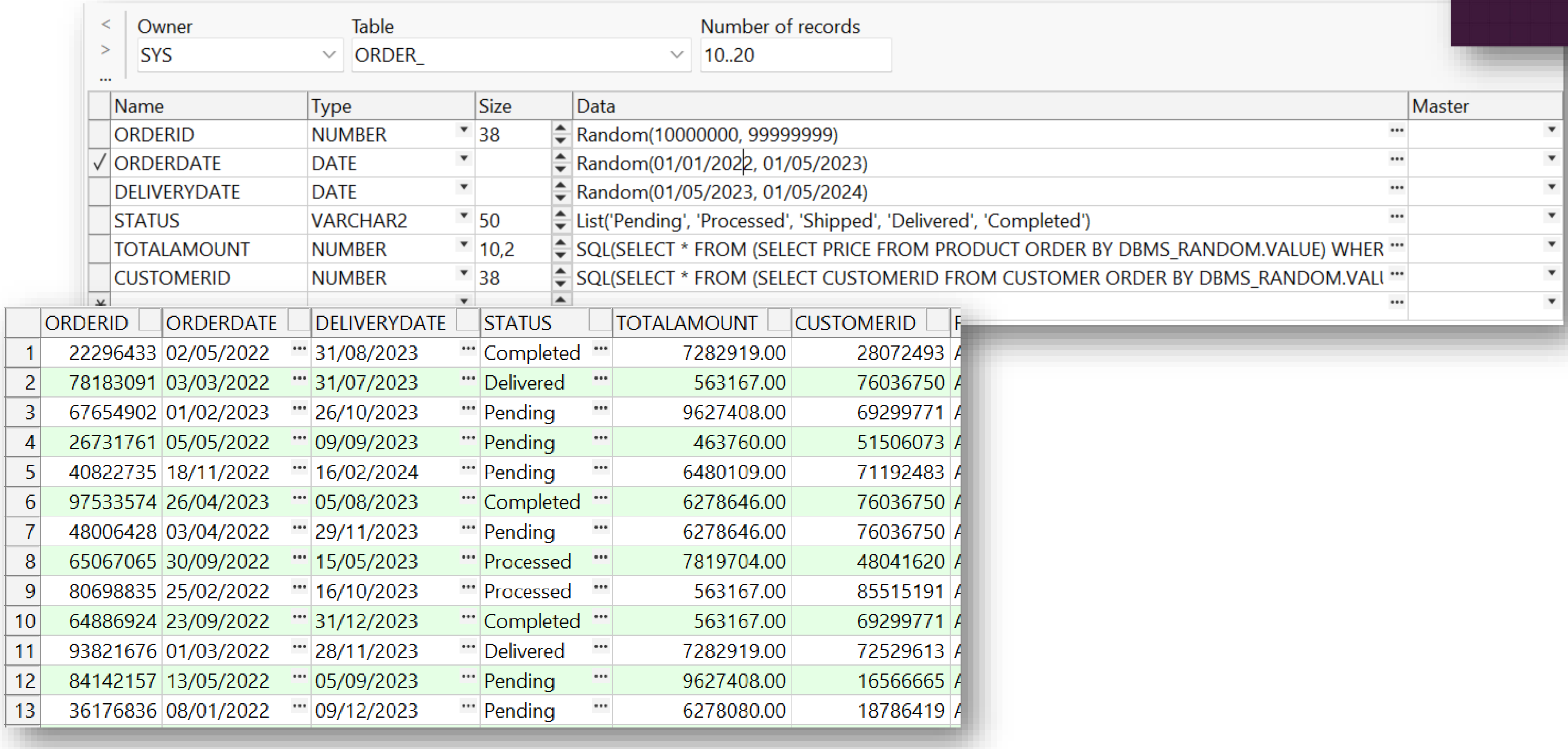


Owner: SYS
Table: SUPPORT_TICKET
Number of records: 10..20

	Name	Type	Size	Data	Master
	TICKETID	NUMBER	38	Random(10000000, 99999999)	
	ISSUEDESCRIPTION	VARCHAR2	4000	List('Reliability of detection systems', 'Interception accuracy', 'Communication latency', 'Maintenar	
	STATUS	VARCHAR2	50	List('Open', 'Pending', 'Resolved', 'Closed', 'Escalated')	
	CREATEDDATE	DATE		Random(01/01/2022, 01/05/2023)	
✓	RESOLVEDDATE	DATE		Random(01/05/2023, 01/05/2024)	
	CUSTOMERID	NUMBER	38	SQL(SELECT * FROM (SELECT CUSTOMERID FROM CUSTOMER ORDER BY DBMS_RANDOM.VALU	
	ACCOUNTMANAGERID	NUMBER	38	SQL(SELECT * FROM (SELECT ACCOUNTMANAGERID FROM ACCOUNT_MANAGER ORDER BY D	

	TICKETID	ISSUEDESCRIPTION	STATUS	CREATEDDATE	RESOLVEDDATE	CUSTOMERID	ACCOUNTMANAGERID	ROWID
1	97186012	Vulnerability to cyber attacks	Open	03/06/2022	17/01/2024	60553929	70597847	AAAS+8AABAAAp
2	73856054	Vulnerability to cyber attacks	Pending	15/03/2023	10/07/2023	32664711	44543774	AAAS+8AABAAAp
3	94904186	Environmental adaptability	Escalated	16/11/2022	10/07/2023	16566665	69348183	AAAS+8AABAAAp
4	35953341	False positives and negatives	Escalated	10/05/2022	30/07/2023	18786419	95173305	AAAS+8AABAAAp
5	32493367	Maintenance and operational costs	Open	28/06/2022	22/09/2023	71192483	95173305	AAAS+8AABAAAp
6	53815990	Integration with existing defense systems	Escalated	31/03/2022	18/05/2023	48041620	44543774	AAAS+8AABAAAp
7	36360579	Supply chain security	Escalated	24/04/2022	13/01/2024	60553929	91289020	AAAS+8AABAAAp
8	54745964	Interception accuracy	Open	22/09/2022	06/08/2023	72529613	74709883	AAAS+8AABAAAp
9	12877487	Communication latency	Pending	31/10/2022	01/07/2023	32664711	95173305	AAAS+8AABAAAp
10	12928372	Reliability of detection systems	Resolved	11/03/2023	23/11/2023	69299771	44543774	AAAS+8AABAAAp
11	37656129	Vulnerability to cyber attacks	Closed	19/08/2022	24/08/2023	16566665	56955700	AAAS+8AABAAAp
12	87268516	Reliability of detection systems	Open	06/03/2022	12/07/2023	76036750	74709883	AAAS+8AABAAAp

DATA GENERATOR: ORDER



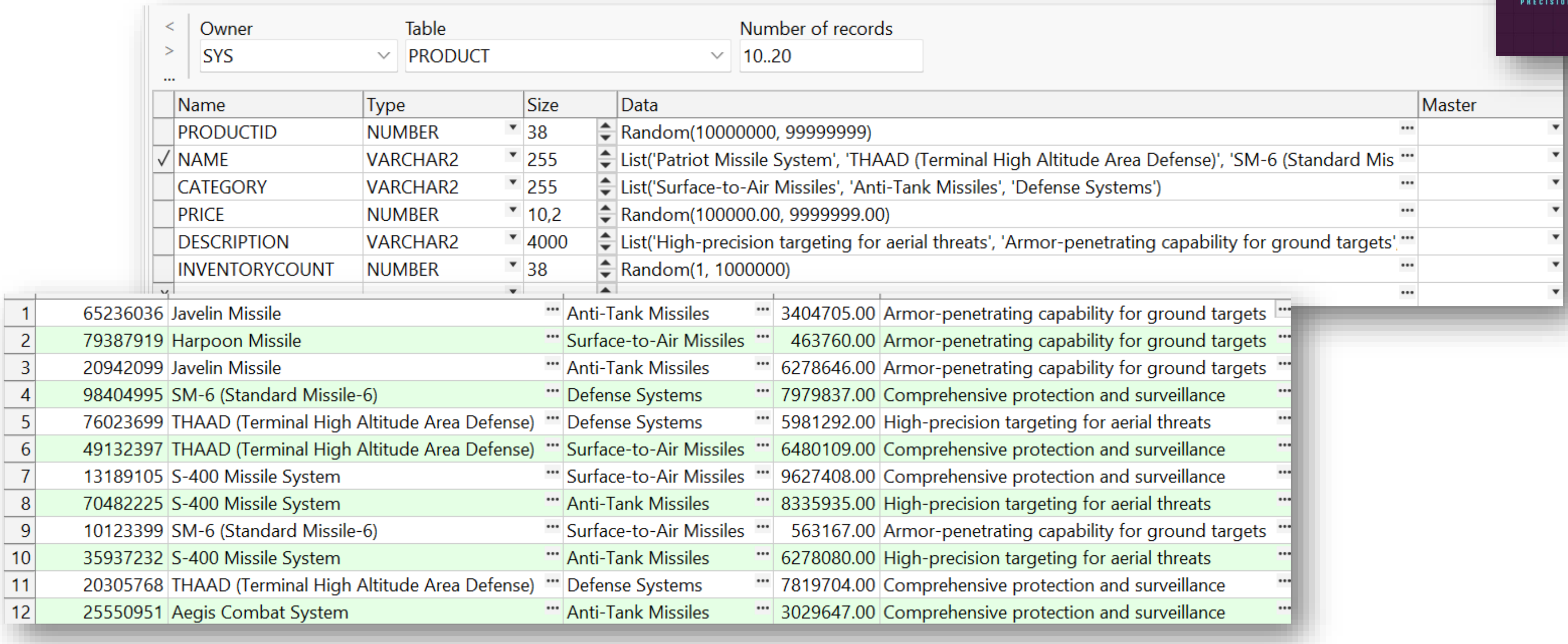
Owner	Table	Number of records
SYS	ORDER_	10..20

	Name	Type	Size	Data	Master
	ORDERID	NUMBER	38	Random(10000000, 99999999)	
✓	ORDERDATE	DATE		Random(01/01/2022, 01/05/2023)	
	DELIVERYDATE	DATE		Random(01/05/2023, 01/05/2024)	
	STATUS	VARCHAR2	50	List('Pending', 'Processed', 'Shipped', 'Delivered', 'Completed')	
	TOTALAMOUNT	NUMBER	10,2	SQL(SELECT * FROM (SELECT PRICE FROM PRODUCT ORDER BY DBMS_RANDOM.VALUE) WHER	
	CUSTOMERID	NUMBER	38	SQL(SELECT * FROM (SELECT CUSTOMERID FROM CUSTOMER ORDER BY DBMS_RANDOM.VALI	
*					

	ORDERID	ORDERDATE	DELIVERYDATE	STATUS	TOTALAMOUNT	CUSTOMERID	F
1	22296433	02/05/2022	31/08/2023	Completed	7282919.00	28072493	A
2	78183091	03/03/2022	31/07/2023	Delivered	563167.00	76036750	A
3	67654902	01/02/2023	26/10/2023	Pending	9627408.00	69299771	A
4	26731761	05/05/2022	09/09/2023	Pending	463760.00	51506073	A
5	40822735	18/11/2022	16/02/2024	Pending	6480109.00	71192483	A
6	97533574	26/04/2023	05/08/2023	Completed	6278646.00	76036750	A
7	48006428	03/04/2022	29/11/2023	Pending	6278646.00	76036750	A
8	65067065	30/09/2022	15/05/2023	Processed	7819704.00	48041620	A
9	80698835	25/02/2022	16/10/2023	Processed	563167.00	85515191	A
10	64886924	23/09/2022	31/12/2023	Completed	563167.00	69299771	A
11	93821676	01/03/2022	28/11/2023	Delivered	7282919.00	72529613	A
12	84142157	13/05/2022	05/09/2023	Pending	9627408.00	16566665	A
13	36176836	08/01/2022	09/12/2023	Pending	6278080.00	18786419	A

LEV & MISSILES
PRECISION, PROTECTION , GLOBAL SECURITY

DATA GENERATOR: PRODUCT



Owner: SYS
Table: PRODUCT
Number of records: 10..20

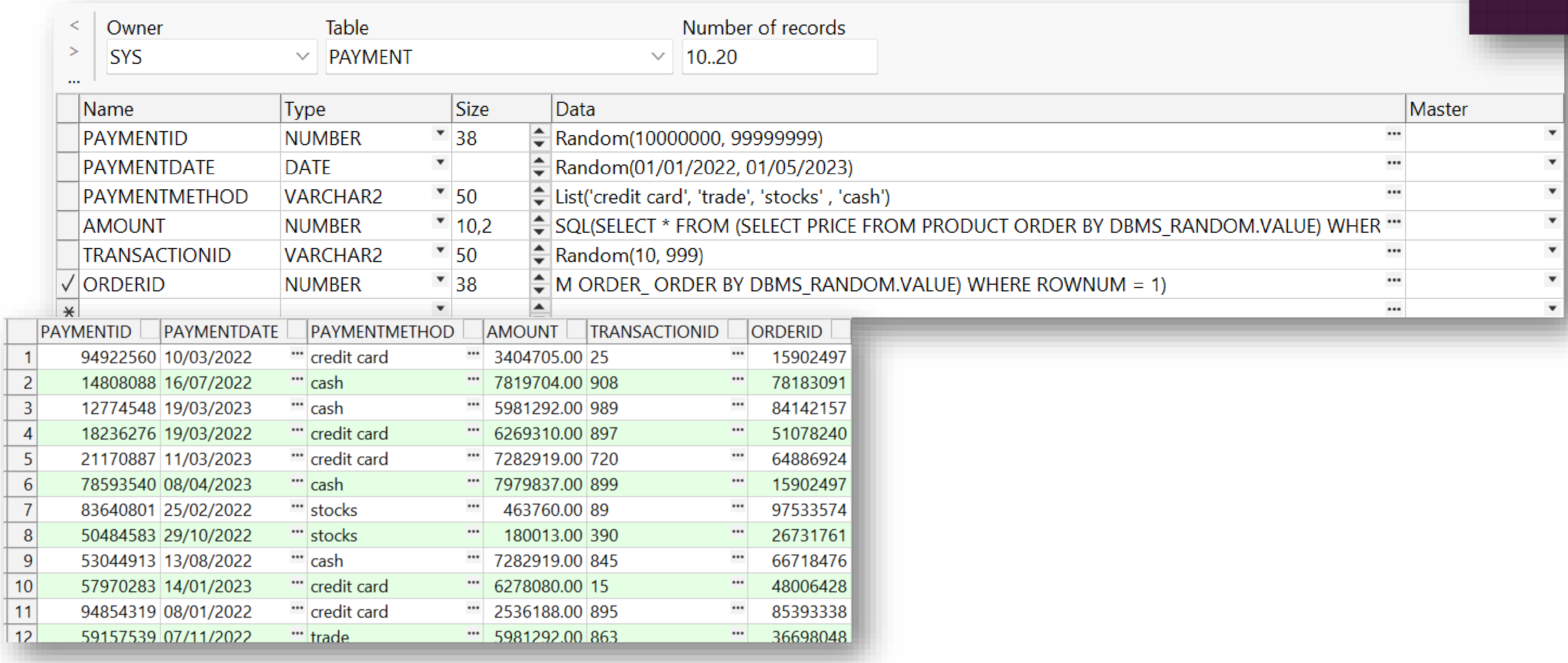
	Name	Type	Size	Data	Master
	PRODUCTID	NUMBER	38	Random(10000000, 99999999)	
✓	NAME	VARCHAR2	255	List('Patriot Missile System', 'THAAD (Terminal High Altitude Area Defense)', 'SM-6 (Standard Mis	
	CATEGORY	VARCHAR2	255	List('Surface-to-Air Missiles', 'Anti-Tank Missiles', 'Defense Systems')	
	PRICE	NUMBER	10,2	Random(100000.00, 9999999.00)	
	DESCRIPTION	VARCHAR2	4000	List('High-precision targeting for aerial threats', 'Armor-penetrating capability for ground targets'	
	INVENTORYCOUNT	NUMBER	38	Random(1, 1000000)	

1	65236036	Javelin Missile	Anti-Tank Missiles	3404705.00	Armor-penetrating capability for ground targets
2	79387919	Harpoon Missile	Surface-to-Air Missiles	463760.00	Armor-penetrating capability for ground targets
3	20942099	Javelin Missile	Anti-Tank Missiles	6278646.00	Armor-penetrating capability for ground targets
4	98404995	SM-6 (Standard Missile-6)	Defense Systems	7979837.00	Comprehensive protection and surveillance
5	76023699	THAAD (Terminal High Altitude Area Defense)	Defense Systems	5981292.00	High-precision targeting for aerial threats
6	49132397	THAAD (Terminal High Altitude Area Defense)	Surface-to-Air Missiles	6480109.00	Comprehensive protection and surveillance
7	13189105	S-400 Missile System	Surface-to-Air Missiles	9627408.00	Comprehensive protection and surveillance
8	70482225	S-400 Missile System	Anti-Tank Missiles	8335935.00	High-precision targeting for aerial threats
9	10123399	SM-6 (Standard Missile-6)	Surface-to-Air Missiles	563167.00	Armor-penetrating capability for ground targets
10	35937232	S-400 Missile System	Anti-Tank Missiles	6278080.00	High-precision targeting for aerial threats
11	20305768	THAAD (Terminal High Altitude Area Defense)	Defense Systems	7819704.00	Comprehensive protection and surveillance
12	25550951	Aegis Combat System	Anti-Tank Missiles	3029647.00	Comprehensive protection and surveillance

LEV & MISSILES

PRECISION, PROTECTION , GLOBAL SECURITY

DATA GENERATOR: PAYMENT



Owner: SYS

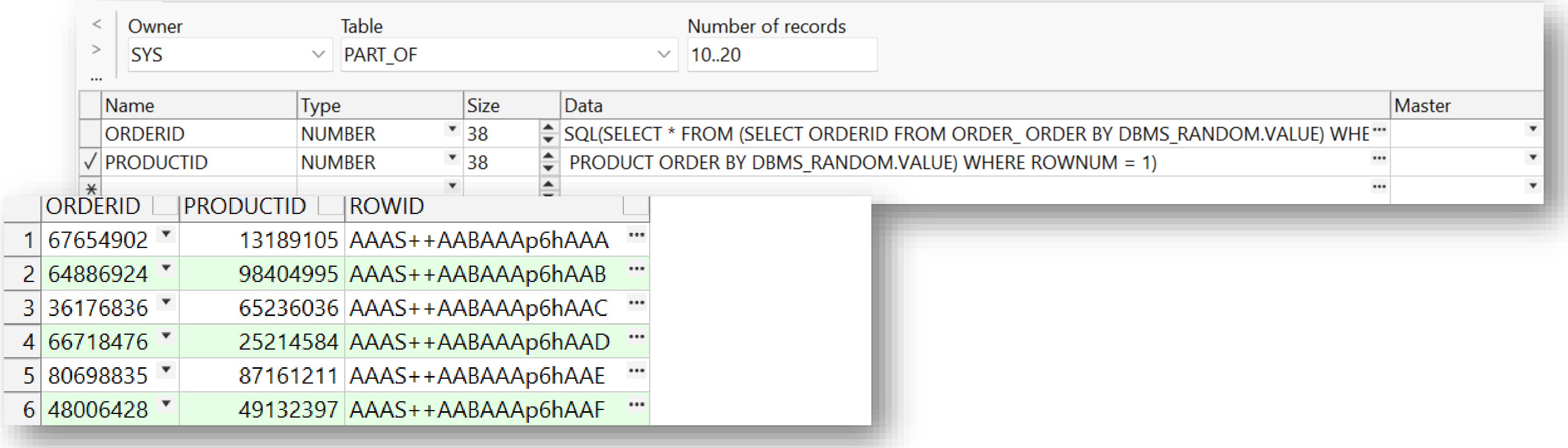
Table: PAYMENT

Number of records: 10..20

	Name	Type	Size	Data	Master
	PAYMENTID	NUMBER	38	Random(10000000, 99999999)	
	PAYMENTDATE	DATE		Random(01/01/2022, 01/05/2023)	
	PAYMENTMETHOD	VARCHAR2	50	List('credit card', 'trade', 'stocks' , 'cash')	
	AMOUNT	NUMBER	10,2	SQL(SELECT * FROM (SELECT PRICE FROM PRODUCT ORDER BY DBMS_RANDOM.VALUE) WHER	
	TRANSACTIONID	VARCHAR2	50	Random(10, 999)	
✓	ORDERID	NUMBER	38	M ORDER_ ORDER BY DBMS_RANDOM.VALUE) WHERE ROWNUM = 1)	
*					

	PAYMENTID	PAYMENTDATE	PAYMENTMETHOD	AMOUNT	TRANSACTIONID	ORDERID
1	94922560	10/03/2022	credit card	3404705.00	25	15902497
2	14808088	16/07/2022	cash	7819704.00	908	78183091
3	12774548	19/03/2023	cash	5981292.00	989	84142157
4	18236276	19/03/2022	credit card	6269310.00	897	51078240
5	21170887	11/03/2023	credit card	7282919.00	720	64886924
6	78593540	08/04/2023	cash	7979837.00	899	15902497
7	83640801	25/02/2022	stocks	463760.00	89	97533574
8	50484583	29/10/2022	stocks	180013.00	390	26731761
9	53044913	13/08/2022	cash	7282919.00	845	66718476
10	57970283	14/01/2023	credit card	6278080.00	15	48006428
11	94854319	08/01/2022	credit card	2536188.00	895	85393338
12	59157539	07/11/2022	trade	5981292.00	863	36698048

DATA GENERATOR: ORDER & PRODUCT M:N RELATION



Owner: SYS
Table: PART_OF
Number of records: 10..20

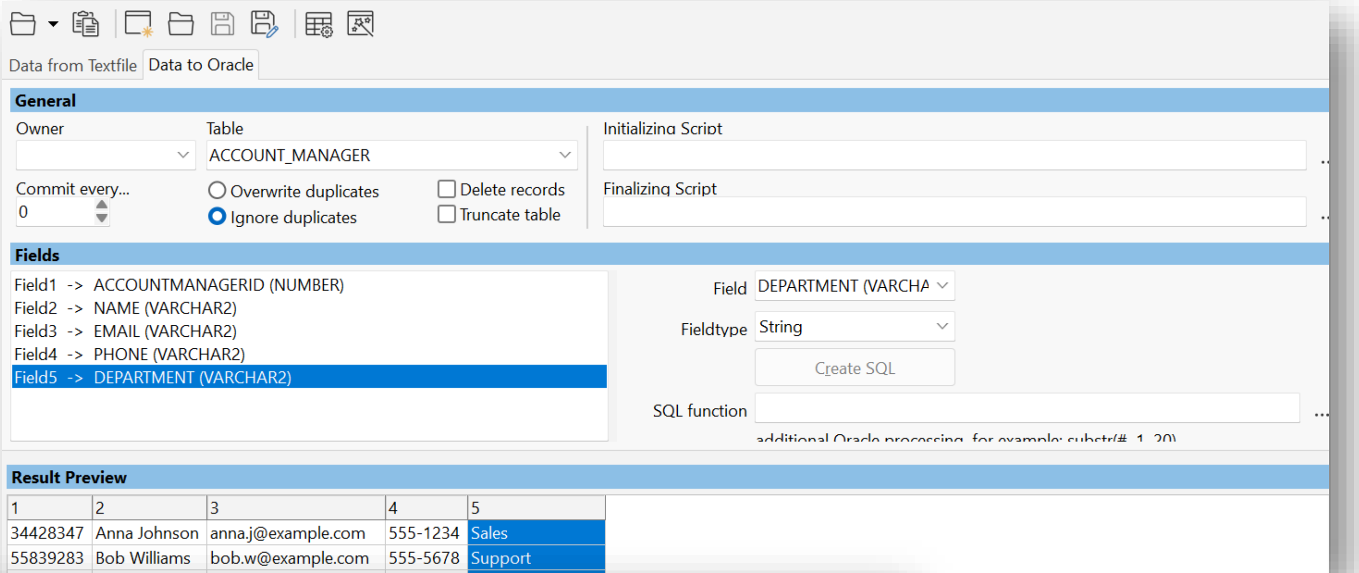
	Name	Type	Size	Data	Master
	ORDERID	NUMBER	38	SQL(SELECT * FROM (SELECT ORDERID FROM ORDER_ ORDER BY DBMS_RANDOM.VALUE) WHE	
✓	PRODUCTID	NUMBER	38	PRODUCT ORDER BY DBMS_RANDOM.VALUE) WHERE ROWNUM = 1)	
*					

	ORDERID	PRODUCTID	ROWID
1	67654902	13189105	AAAS++AABAAAp6hAAA
2	64886924	98404995	AAAS++AABAAAp6hAAB
3	36176836	65236036	AAAS++AABAAAp6hAAC
4	66718476	25214584	AAAS++AABAAAp6hAAD
5	80698835	87161211	AAAS++AABAAAp6hAAE
6	48006428	49132397	AAAS++AABAAAp6hAAF

TEXT IMPORT GENERATOR: ACCOUNT MANAGER

LEV & MISSILES

PRECISION, PROTECTION , GLOBAL SECURITY



Data from Textfile | Data to Oracle

General

Owner:

Table: ACCOUNT_MANAGER

Commit every... 0

○ Overwrite duplicates
● Ignore duplicates

□ Delete records
□ Truncate table

Initializing Script

Finalizing Script

Fields

Field1 -> ACCOUNTMANAGERID (NUMBER)
Field2 -> NAME (VARCHAR2)
Field3 -> EMAIL (VARCHAR2)
Field4 -> PHONE (VARCHAR2)
Field5 -> DEPARTMENT (VARCHAR2)

Field: DEPARTMENT (VARCHA

Fieldtype: String

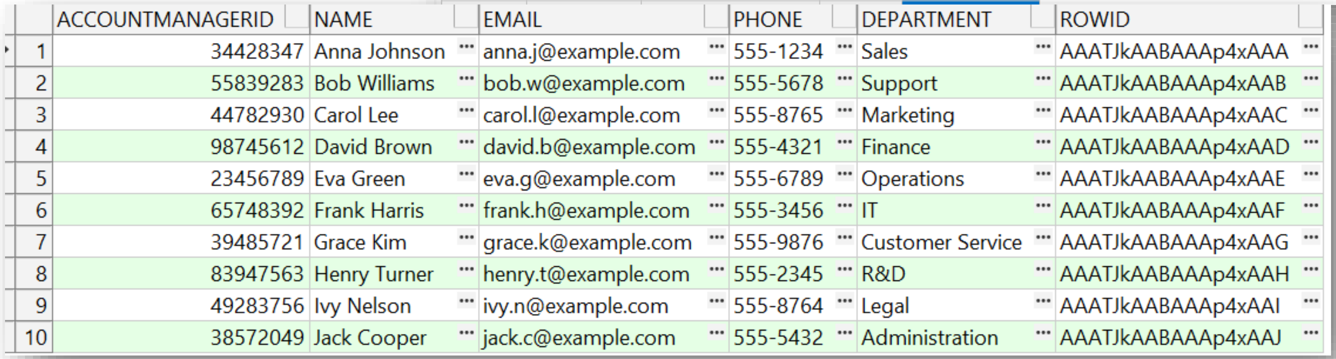
Create SQL

SQL function

additional Oracle processing, for example: substr(#, 1, 20)

Result Preview

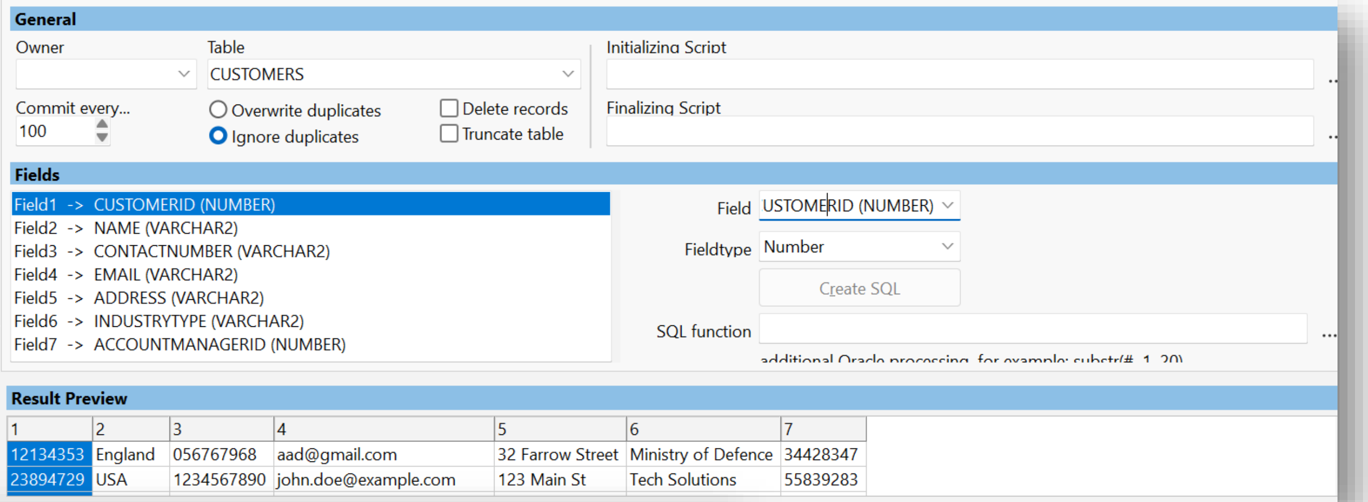
1	2	3	4	5
34428347	Anna Johnson	anna.j@example.com	555-1234	Sales
55839283	Bob Williams	bob.w@example.com	555-5678	Support



	ACCOUNTMANAGERID	NAME	EMAIL	PHONE	DEPARTMENT	ROWID
1	34428347	Anna Johnson	anna.j@example.com	555-1234	Sales	AAATJkAABAAAp4xAAA
2	55839283	Bob Williams	bob.w@example.com	555-5678	Support	AAATJkAABAAAp4xAAB
3	44782930	Carol Lee	carol.l@example.com	555-8765	Marketing	AAATJkAABAAAp4xAAC
4	98745612	David Brown	david.b@example.com	555-4321	Finance	AAATJkAABAAAp4xAAD
5	23456789	Eva Green	eva.g@example.com	555-6789	Operations	AAATJkAABAAAp4xAAE
6	65748392	Frank Harris	frank.h@example.com	555-3456	IT	AAATJkAABAAAp4xAAF
7	39485721	Grace Kim	grace.k@example.com	555-9876	Customer Service	AAATJkAABAAAp4xAAG
8	83947563	Henry Turner	henry.t@example.com	555-2345	R&D	AAATJkAABAAAp4xAAH
9	49283756	Ivy Nelson	ivy.n@example.com	555-8764	Legal	AAATJkAABAAAp4xAAI
10	38572049	Jack Cooper	jack.c@example.com	555-5432	Administration	AAATJkAABAAAp4xAAJ

Link for Text file (.txt)

TEXT IMPORT GENERATOR:
CUSTOMERS



General

Owner:

Table: CUSTOMERS

Commit every... 100

○ Overwrite duplicates
● Ignore duplicates

□ Delete records
□ Truncate table

Initializing Script

Finalizing Script

Fields

```
Field1  ->  CUSTOMERID (NUMBER)
Field2  ->  NAME (VARCHAR2)
Field3  ->  CONTACTNUMBER (VARCHAR2)
Field4  ->  EMAIL (VARCHAR2)
Field5  ->  ADDRESS (VARCHAR2)
Field6  ->  INDUSTRYTYPE (VARCHAR2)
Field7  ->  ACCOUNTMANAGERID (NUMBER)
```

Field: USTOMERID (NUMBER)

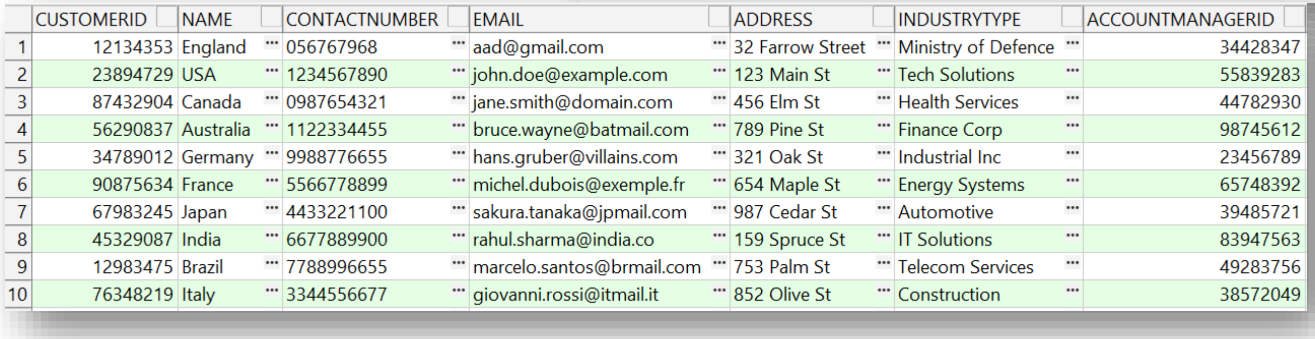
Fieldtype: Number

SQL function:

additional Oracle processing, for example: substr(#, 1, 20)

Result Preview

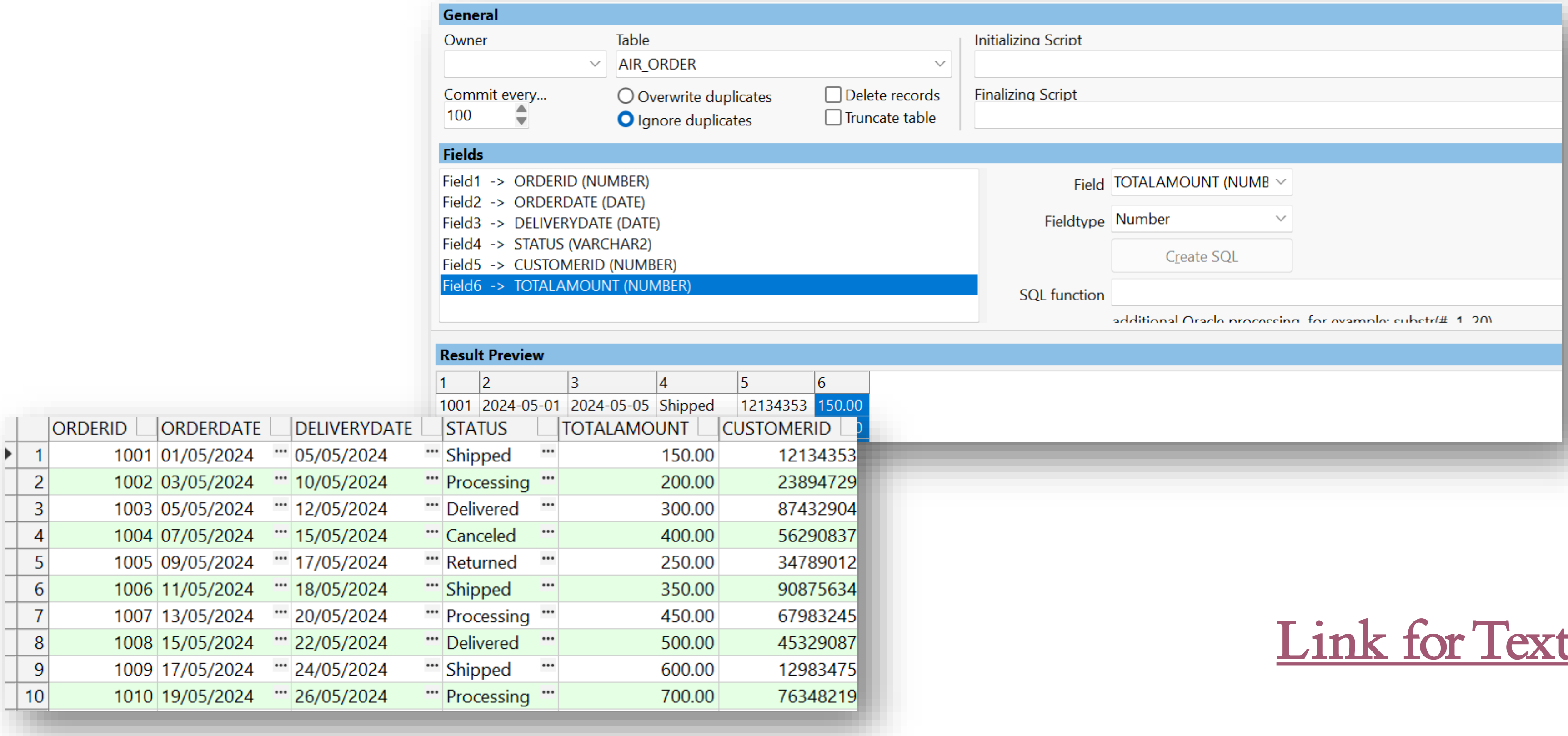
1	2	3	4	5	6	7
12134353	England	056767968	aad@gmail.com	32 Farrow Street	Ministry of Defence	34428347
23894729	USA	1234567890	john.doe@example.com	123 Main St	Tech Solutions	55839283



	CUSTOMERID	NAME	CONTACTNUMBER	EMAIL	ADDRESS	INDUSTRYTYPE	ACCOUNTMANAGERID
1	12134353	England	056767968	aad@gmail.com	32 Farrow Street	Ministry of Defence	34428347
2	23894729	USA	1234567890	john.doe@example.com	123 Main St	Tech Solutions	55839283
3	87432904	Canada	0987654321	jane.smith@domain.com	456 Elm St	Health Services	44782930
4	56290837	Australia	1122334455	bruce.wayne@batmail.com	789 Pine St	Finance Corp	98745612
5	34789012	Germany	9988776655	hans.gruber@villains.com	321 Oak St	Industrial Inc	23456789
6	90875634	France	5566778899	michel.dubois@exemple.fr	654 Maple St	Energy Systems	65748392
7	67983245	Japan	4433221100	sakura.tanaka@jpmail.com	987 Cedar St	Automotive	39485721
8	45329087	India	6677889900	rahul.sharma@india.co	159 Spruce St	IT Solutions	83947563
9	12983475	Brazil	7788996655	marcelo.santos@brmail.com	753 Palm St	Telecom Services	49283756
10	76348219	Italy	3344556677	giovanni.rossi@itmail.it	852 Olive St	Construction	38572049

Link for Text file (.txt)

TEXT IMPORT GENERATOR: ORDER



General

Owner:

Table: AIR_ORDER

Commit every...: 100

○ Overwrite duplicates

● Ignore duplicates

□ Delete records

□ Truncate table

Initializing Script

Finalizing Script

Fields

Field1 -> ORDERID (NUMBER)
Field2 -> ORDERDATE (DATE)
Field3 -> DELIVERYDATE (DATE)
Field4 -> STATUS (VARCHAR2)
Field5 -> CUSTOMERID (NUMBER)
Field6 -> TOTALAMOUNT (NUMBER)

Field: TOTALAMOUNT (NUMB

Fieldtype: Number

SQL function

additional Oracle processing, for example: substr(#, 1, 20)

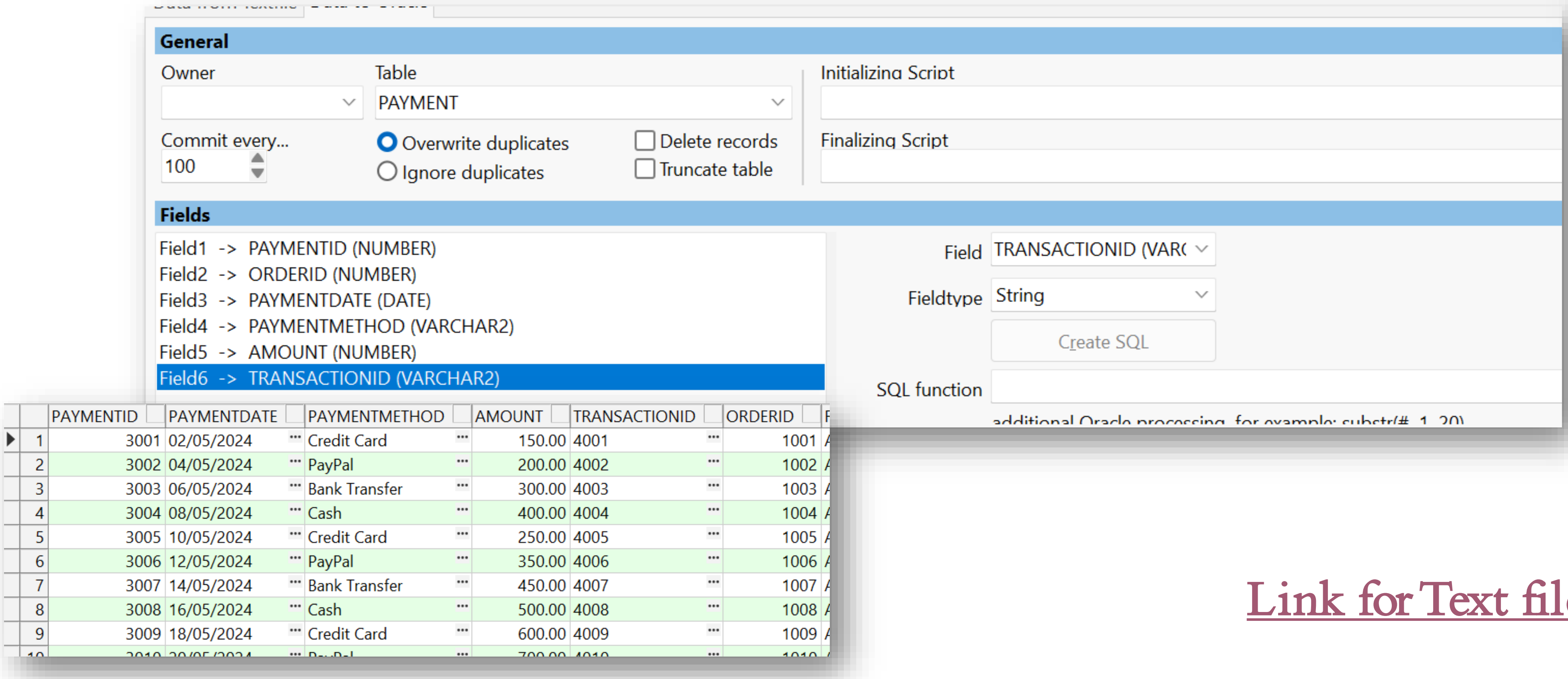
Result Preview

1	2	3	4	5	6
1001	2024-05-01	2024-05-05	Shipped	12134353	150.00

	ORDERID	ORDERDATE	DELIVERYDATE	STATUS	TOTALAMOUNT	CUSTOMERID
1	1001	01/05/2024	05/05/2024	Shipped	150.00	12134353
2	1002	03/05/2024	10/05/2024	Processing	200.00	23894729
3	1003	05/05/2024	12/05/2024	Delivered	300.00	87432904
4	1004	07/05/2024	15/05/2024	Canceled	400.00	56290837
5	1005	09/05/2024	17/05/2024	Returned	250.00	34789012
6	1006	11/05/2024	18/05/2024	Shipped	350.00	90875634
7	1007	13/05/2024	20/05/2024	Processing	450.00	67983245
8	1008	15/05/2024	22/05/2024	Delivered	500.00	45329087
9	1009	17/05/2024	24/05/2024	Shipped	600.00	12983475
10	1010	19/05/2024	26/05/2024	Processing	700.00	76348219

Link for Text file (.txt)

TEXT IMPORT GENERATOR: PAYMENT



General

Owner:

Table: PAYMENT

Commit every... 100

● Overwrite duplicates
○ Ignore duplicates

□ Delete records
□ Truncate table

Initializing Script

Finalizing Script

Fields

Field1 -> PAYMENTID (NUMBER)
Field2 -> ORDERID (NUMBER)
Field3 -> PAYMENTDATE (DATE)
Field4 -> PAYMENTMETHOD (VARCHAR2)
Field5 -> AMOUNT (NUMBER)
Field6 -> TRANSACTIONID (VARCHAR2)

Field: TRANSACTIONID (VAR(

Fieldtype: String

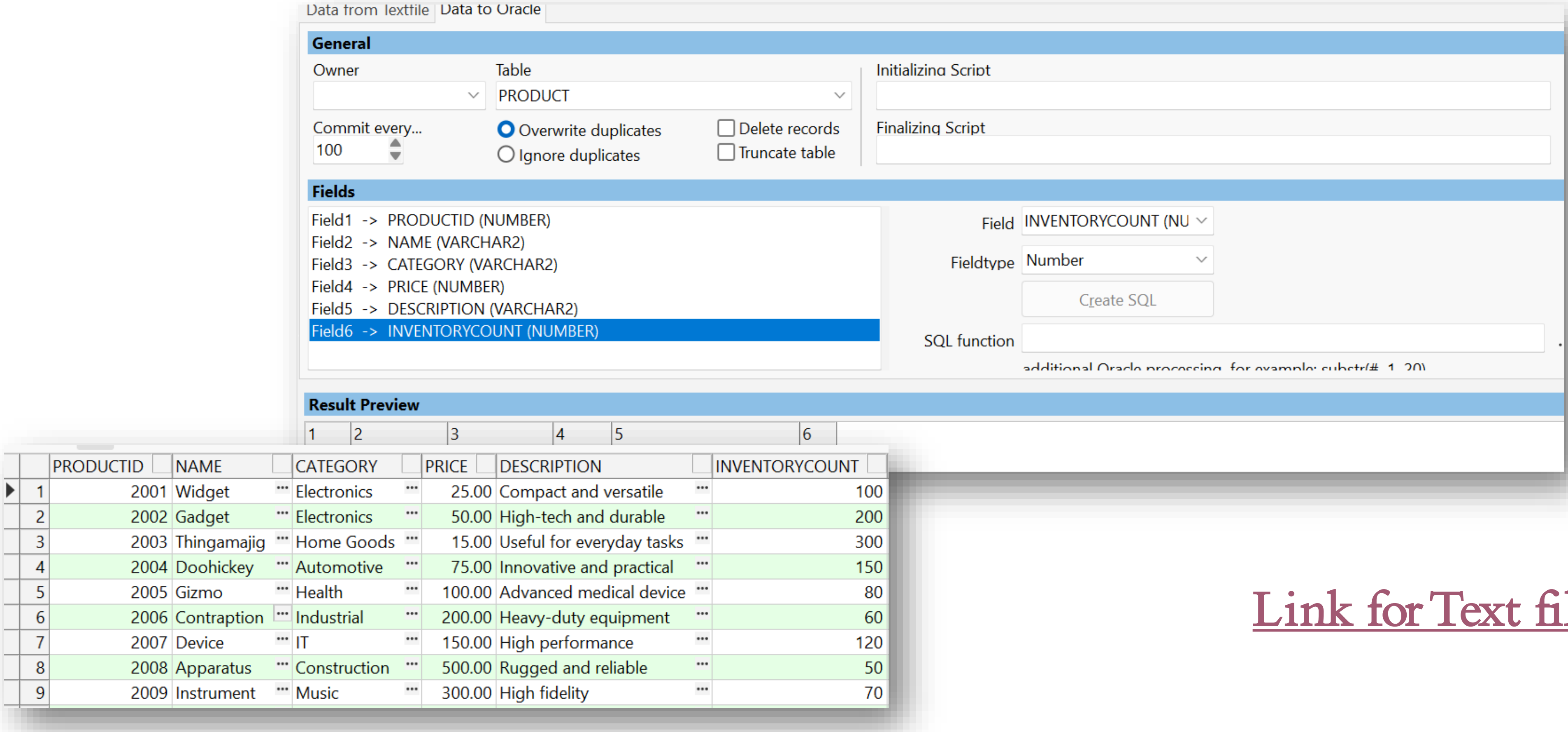
SQL function

additional Oracle processing, for example: substr(#, 1, 20)

	PAYMENTID	PAYMENTDATE	PAYMENTMETHOD	AMOUNT	TRANSACTIONID	ORDERID	F
1	3001	02/05/2024	Credit Card	150.00	4001	1001	A
2	3002	04/05/2024	PayPal	200.00	4002	1002	A
3	3003	06/05/2024	Bank Transfer	300.00	4003	1003	A
4	3004	08/05/2024	Cash	400.00	4004	1004	A
5	3005	10/05/2024	Credit Card	250.00	4005	1005	A
6	3006	12/05/2024	PayPal	350.00	4006	1006	A
7	3007	14/05/2024	Bank Transfer	450.00	4007	1007	A
8	3008	16/05/2024	Cash	500.00	4008	1008	A
9	3009	18/05/2024	Credit Card	600.00	4009	1009	A
10	3010	20/05/2024	PayPal	700.00	4010	1010	

Link for Text file (.txt)

TEXT IMPORT GENERATOR: PRODUCT



Owner:
Table: PRODUCT

Initializing Script:

Commit every... 100

● Overwrite duplicates
○ Ignore duplicates

□ Delete records
□ Truncate table

Finalizing Script:

Field1 -> PRODUCTID (NUMBER)
Field2 -> NAME (VARCHAR2)
Field3 -> CATEGORY (VARCHAR2)
Field4 -> PRICE (NUMBER)
Field5 -> DESCRIPTION (VARCHAR2)
Field6 -> INVENTORYCOUNT (NUMBER)

Field: INVENTORYCOUNT (NU

Fieldtype: Number

SQL function:

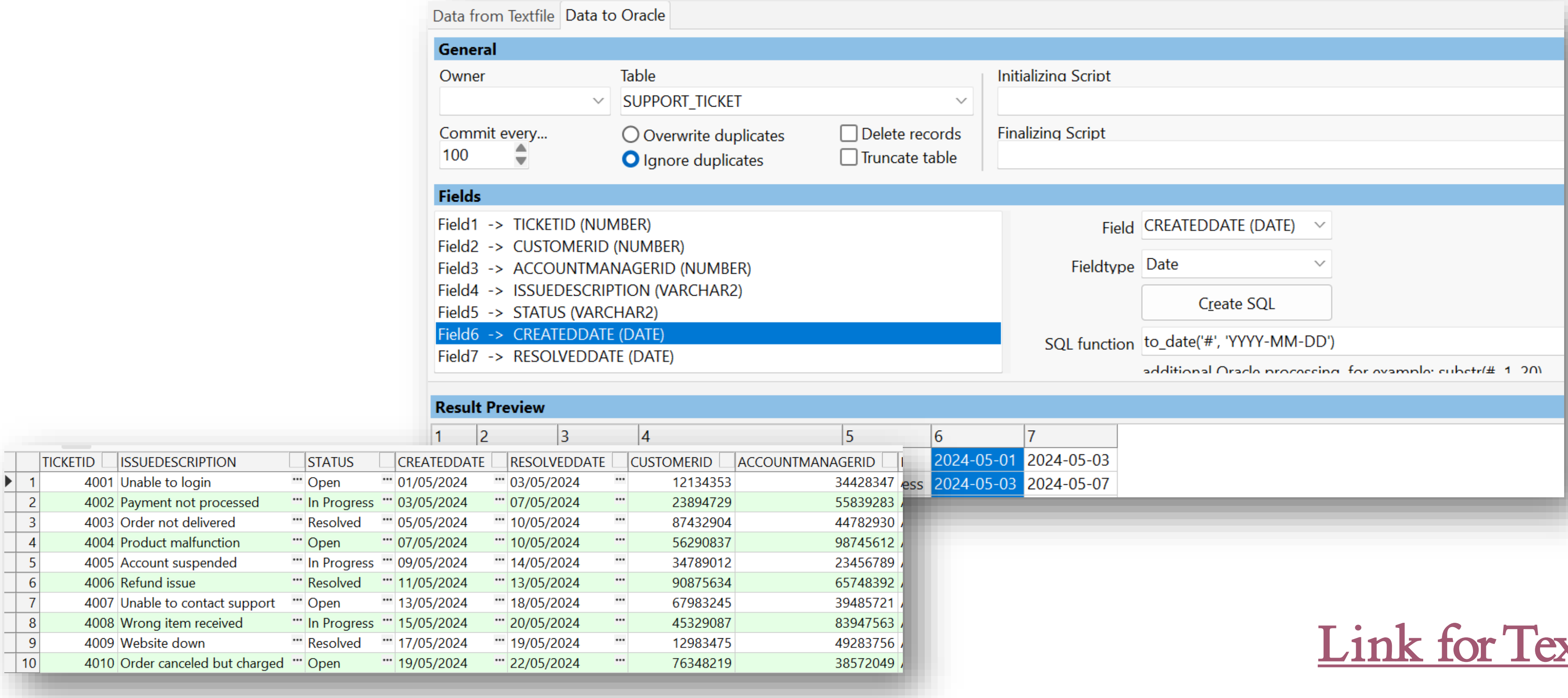
additional Oracle processing, for example: substr(#, 1, 20)

1 2 3 4 5 6

	PRODUCTID	NAME	CATEGORY	PRICE	DESCRIPTION	INVENTORYCOUNT
1	2001	Widget	Electronics	25.00	Compact and versatile	100
2	2002	Gadget	Electronics	50.00	High-tech and durable	200
3	2003	Thingamajig	Home Goods	15.00	Useful for everyday tasks	300
4	2004	Doohickey	Automotive	75.00	Innovative and practical	150
5	2005	Gizmo	Health	100.00	Advanced medical device	80
6	2006	Contraption	Industrial	200.00	Heavy-duty equipment	60
7	2007	Device	IT	150.00	High performance	120
8	2008	Apparatus	Construction	500.00	Rugged and reliable	50
9	2009	Instrument	Music	300.00	High fidelity	70

[Link for Text file (.txt)]

TEXT IMPORT GENERATOR:
SUPPORT TICKET



Owner:

Table: SUPPORT_TICKET

Initializing Script:

Commit every... 100

○ Overwrite duplicates

● Ignore duplicates

□ Delete records

□ Truncate table

Finalizing Script:

Field1 -> TICKETID (NUMBER)
Field2 -> CUSTOMERID (NUMBER)
Field3 -> ACCOUNTMANAGERID (NUMBER)
Field4 -> ISSUEDESCRIPTION (VARCHAR2)
Field5 -> STATUS (VARCHAR2)
Field6 -> CREATEDDATE (DATE)
Field7 -> RESOLVEDDATE (DATE)

Field: CREATEDDATE (DATE)

Fieldtype: Date

SQL function: to_date('#', 'YYYY-MM-DD')

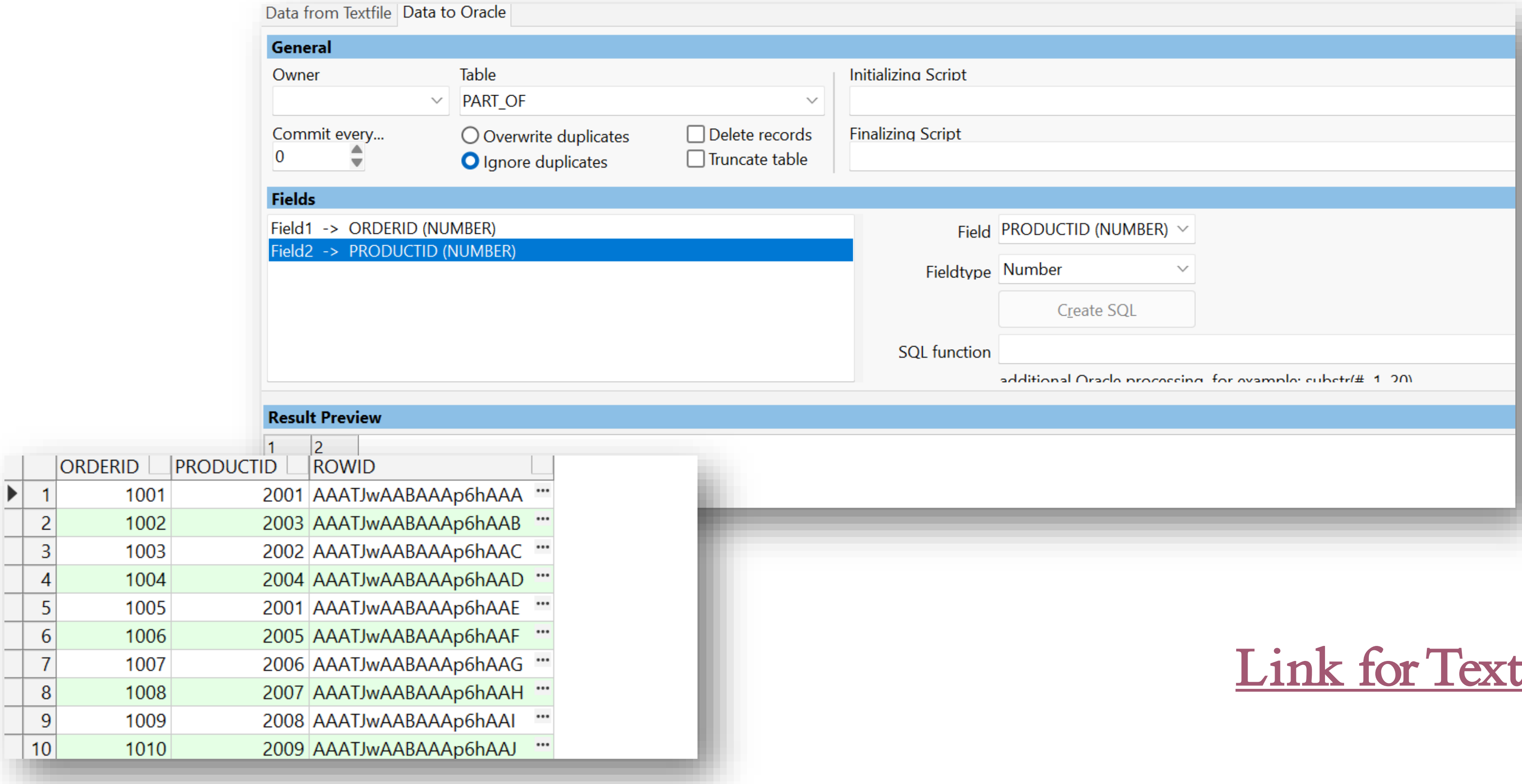
additional Oracle processing, for example: substr(#, 1, 20)

1	2	3	4	5	6	7
					2024-05-01	2024-05-03
				ess	2024-05-03	2024-05-07

	TICKETID	ISSUEDESCRIPTION	STATUS	CREATEDDATE	RESOLVEDDATE	CUSTOMERID	ACCOUNTMANAGERID
1	4001	Unable to login	Open	01/05/2024	03/05/2024	12134353	34428347
2	4002	Payment not processed	In Progress	03/05/2024	07/05/2024	23894729	55839283
3	4003	Order not delivered	Resolved	05/05/2024	10/05/2024	87432904	44782930
4	4004	Product malfunction	Open	07/05/2024	10/05/2024	56290837	98745612
5	4005	Account suspended	In Progress	09/05/2024	14/05/2024	34789012	23456789
6	4006	Refund issue	Resolved	11/05/2024	13/05/2024	90875634	65748392
7	4007	Unable to contact support	Open	13/05/2024	18/05/2024	67983245	39485721
8	4008	Wrong item received	In Progress	15/05/2024	20/05/2024	45329087	83947563
9	4009	Website down	Resolved	17/05/2024	19/05/2024	12983475	49283756
10	4010	Order canceled but charged	Open	19/05/2024	22/05/2024	76348219	38572049

Link for Text file (.txt)

TEXT IMPORT GENERATOR:
ORDER & PRODUCT M:N RELATION



General

Owner:

Table: PART_OF

Initializing Script:

Commit every... 0

○ Overwrite duplicates
● Ignore duplicates

□ Delete records
□ Truncate table

Finalizing Script:

Fields

Field1 -> ORDERID (NUMBER)
Field2 -> PRODUCTID (NUMBER)

Field: PRODUCTID (NUMBER)

Fieldtype: Number

SQL function:

additional Oracle processing, for example: substr(#, 1, 20)

Result Preview

	ORDERID	PRODUCTID	ROWID
1	1001	2001	AAATJwAABAAAp6hAAA
2	1002	2003	AAATJwAABAAAp6hAAB
3	1003	2002	AAATJwAABAAAp6hAAC
4	1004	2004	AAATJwAABAAAp6hAAD
5	1005	2001	AAATJwAABAAAp6hAAE
6	1006	2005	AAATJwAABAAAp6hAAF
7	1007	2006	AAATJwAABAAAp6hAAG
8	1008	2007	AAATJwAABAAAp6hAAH
9	1009	2008	AAATJwAABAAAp6hAAI
10	1010	2009	AAATJwAABAAAp6hAAJ

Link for Text file (.txt)

EXCEL IMPORT GENERATOR: USING MOCKAROO.COM

1)ACCOUNT MANAGER EXCEL

2)CUSTOMER EXCEL

3)ORDER EXCEL

4)PAYMENT EXCEL

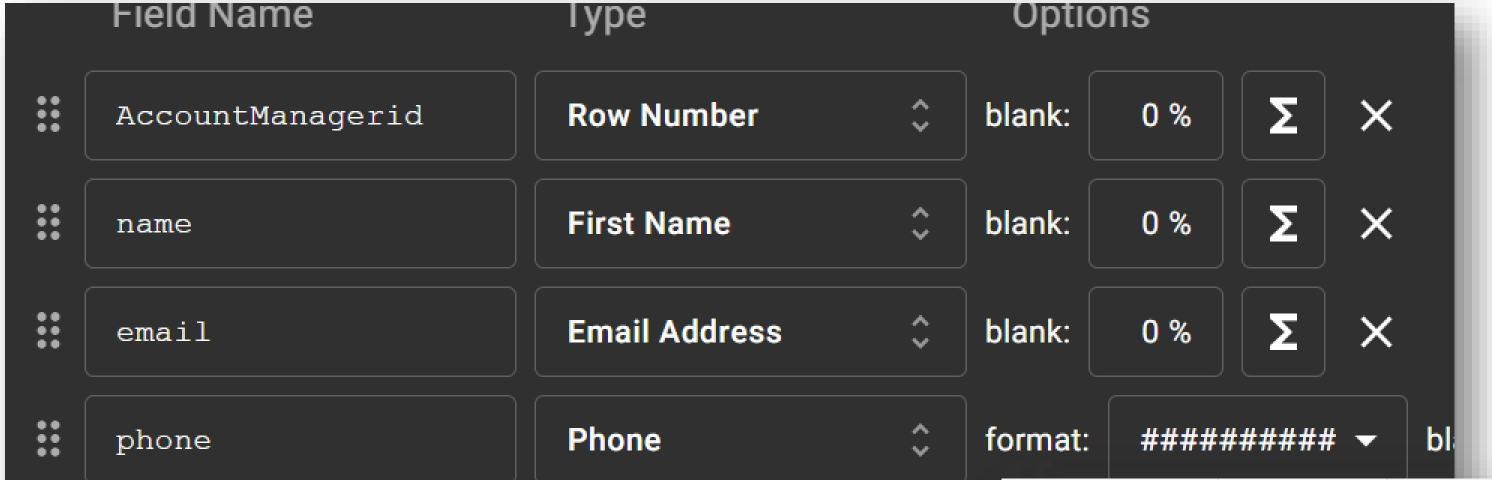
5)PRODUCT EXCEL

6)SUPPORT TICKET EXCEL

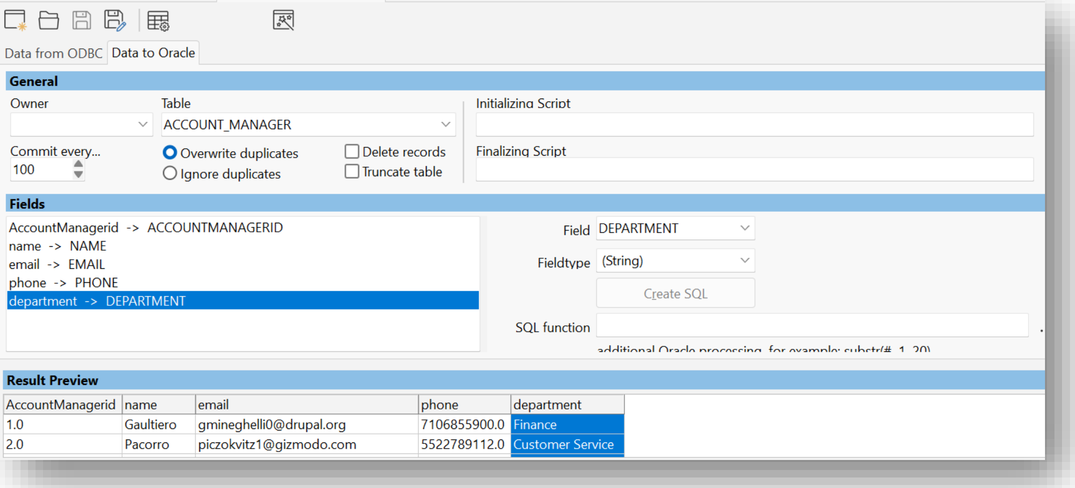
7)PART OF (ORDER & PRODUCT M:N RELATION) EXCEL

EXCEL IMPORT GENERATOR:
ACCOUNT MANAGER

LEV & MISSILES
PRECISION, PROTECTION , GLOBAL SECURITY



Field Name	Type	Options			
AccountManagerid	Row Number	blank:	0 %	Σ	✕
name	First Name	blank:	0 %	Σ	✕
email	Email Address	blank:	0 %	Σ	✕
phone	Phone	format:	##########	bl	
department	Custom List				



Data from ODBC | Data to Oracle

General

Owner:
Table: ACCOUNT_MANAGER
Initializing Script:
Commit every... 100
● Overwrite duplicates
○ Ignore duplicates
□ Delete records
□ Truncate table
Finalizing Script:

Fields

```
AccountManagerid  ->  ACCOUNTMANAGERID
name  ->  NAME
email  ->  EMAIL
phone  ->  PHONE
department  ->  DEPARTMENT
```

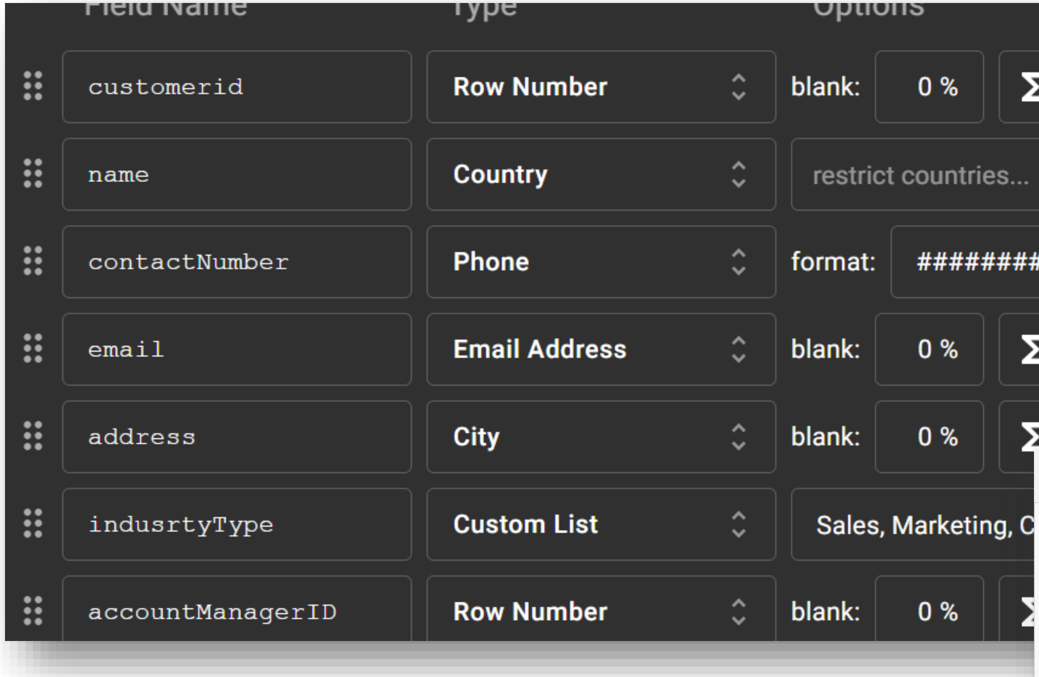
Field: DEPARTMENT
Fieldtype: (String)
Create SQL
SQL function:
additional Oracle processing, for example: substr(#, 1, 20)

Result Preview

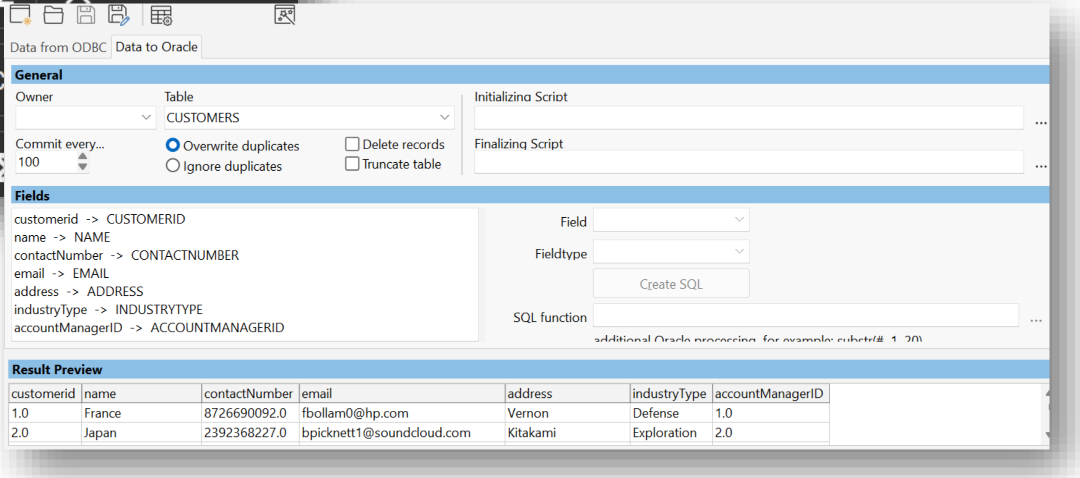
AccountManagerid	name	email	phone	department
1.0	Gaultiero	gmineghelli0@drupal.org	7106855900.0	Finance
2.0	Pacorro	piczokvitz1@gizmodo.com	5522789112.0	Customer Service

EXCEL IMPORT GENERATOR:

CUSTOMERS



Field Name	Type	Options
customerid	Row Number	blank: 0 %
name	Country	restrict countries...
contactNumber	Phone	format: ########## blank: 0 %
email	Email Address	blank: 0 %
address	City	blank: 0 %
indusrtyType	Custom List	Sales, Marketing, C
accountManagerID	Row Number	blank: 0 %



General

Owner:

Table: CUSTOMERS

Commit every... 100

● Overwrite duplicates
○ Ignore duplicates

□ Delete records
□ Truncate table

Initializing Script

Finalizing Script

Fields

customerid -> CUSTOMERID
name -> NAME
contactNumber -> CONTACTNUMBER
email -> EMAIL
address -> ADDRESS
industryType -> INDUSTRYTYPE
accountManagerID -> ACCOUNTMANAGERID

Field

Fieldtype

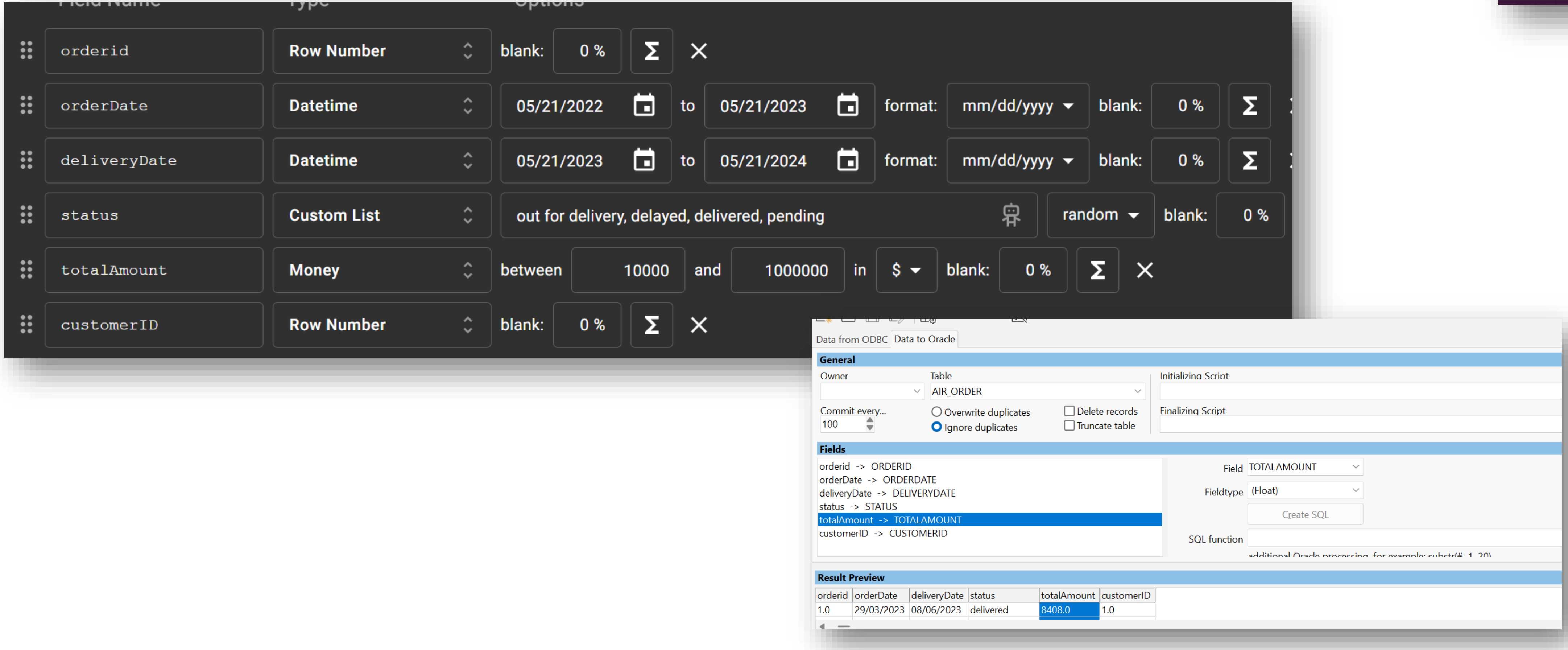
SQL function

additional Oracle processing, for example: substr(#, 1, 20)

Result Preview

customerid	name	contactNumber	email	address	industryType	accountManagerID
1.0	France	8726690092.0	fbollam0@hp.com	Vernon	Defense	1.0
2.0	Japan	2392368227.0	bpicknett1@soundcloud.com	Kitakami	Exploration	2.0

EXCEL IMPORT GENERATOR: ORDER



Field Name	Type	Options
orderid	Row Number	blank: 0 %
orderDate	Datetime	05/21/2022 to 05/21/2023 format: mm/dd/yyyy blank: 0 %
deliveryDate	Datetime	05/21/2023 to 05/21/2024 format: mm/dd/yyyy blank: 0 %
status	Custom List	out for delivery, delayed, delivered, pending random blank: 0 %
totalAmount	Money	between 10000 and 1000000 in $ blank: 0 %
customerID	Row Number	blank: 0 %

Data from ODBC | Data to Oracle

General

Owner:

Table: AIR_ORDER

Initializing Script:

Commit every... 100

○ Overwrite duplicates
● Ignore duplicates

□ Delete records
□ Truncate table

Finalizing Script:

Fields

orderid -> ORDERID
orderDate -> ORDERDATE
deliveryDate -> DELIVERYDATE
status -> STATUS
totalAmount -> TOTALAMOUNT
customerID -> CUSTOMERID

Field: TOTALAMOUNT

Fieldtype: (Float)

Create SQL

SQL function:

additional Oracle processing, for example: substr(#, 1, 20)

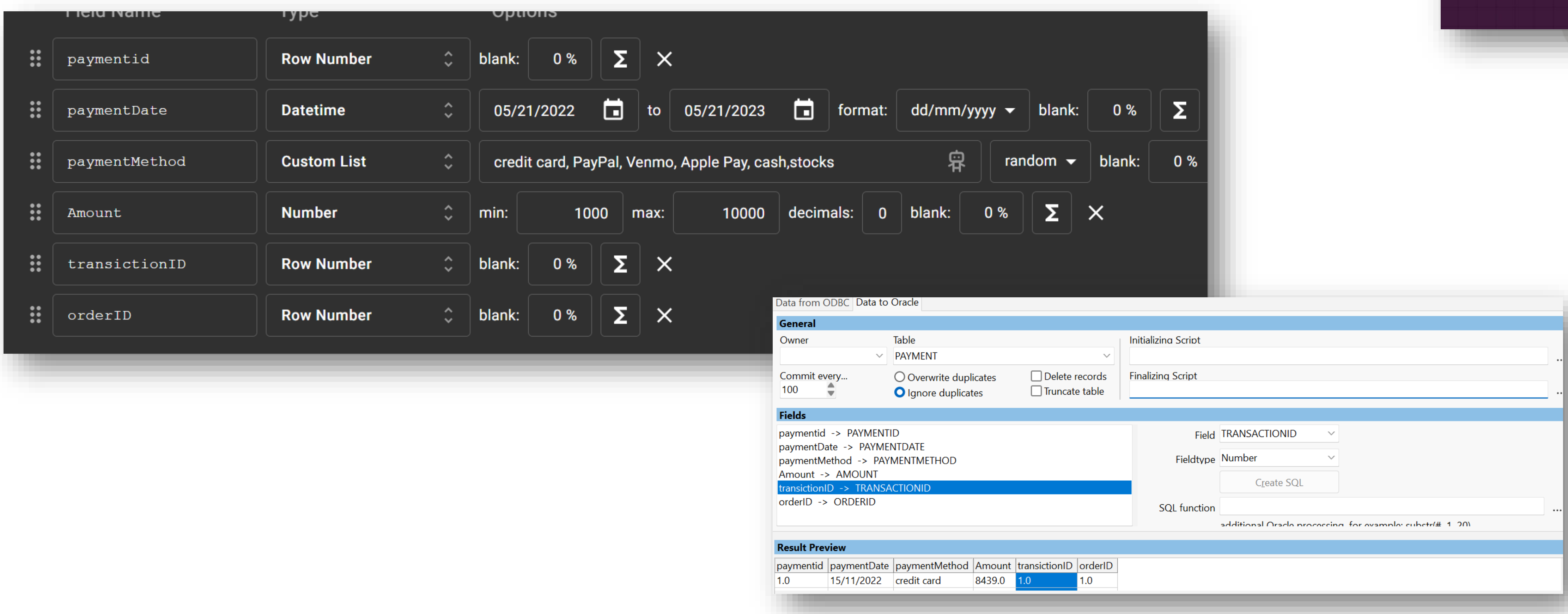
Result Preview

orderid	orderDate	deliveryDate	status	totalAmount	customerID
1.0	29/03/2023	08/06/2023	delivered	8408.0	1.0

LEV & MISSILES

PRECISION, PROTECTION , GLOBAL SECURITY

EXCEL IMPORT GENERATOR:
PAYMENT



Field Name	Type	Options
paymentid	Row Number	blank: 0 %
paymentDate	Datetime	05/21/2022 to 05/21/2023 format: dd/mm/yyyy blank: 0 %
paymentMethod	Custom List	credit card, PayPal, Venmo, Apple Pay, cash,stocks random blank: 0 %
Amount	Number	min: 1000 max: 10000 decimals: 0 blank: 0 %
transictionID	Row Number	blank: 0 %
orderID	Row Number	blank: 0 %

Data from ODBC | Data to Oracle

General

Owner:

Table: PAYMENT

Commit every... 100

○ Overwrite duplicates
● Ignore duplicates

□ Delete records
□ Truncate table

Initializing Script:

Finalizing Script:

Fields

paymentid -> PAYMENTID
paymentDate -> PAYMENTDATE
paymentMethod -> PAYMENTMETHOD
Amount -> AMOUNT
transictionID -> TRANSACTIONID
orderID -> ORDERID

Field: TRANSACTIONID

Fieldtype: Number

Create SQL

SQL function:

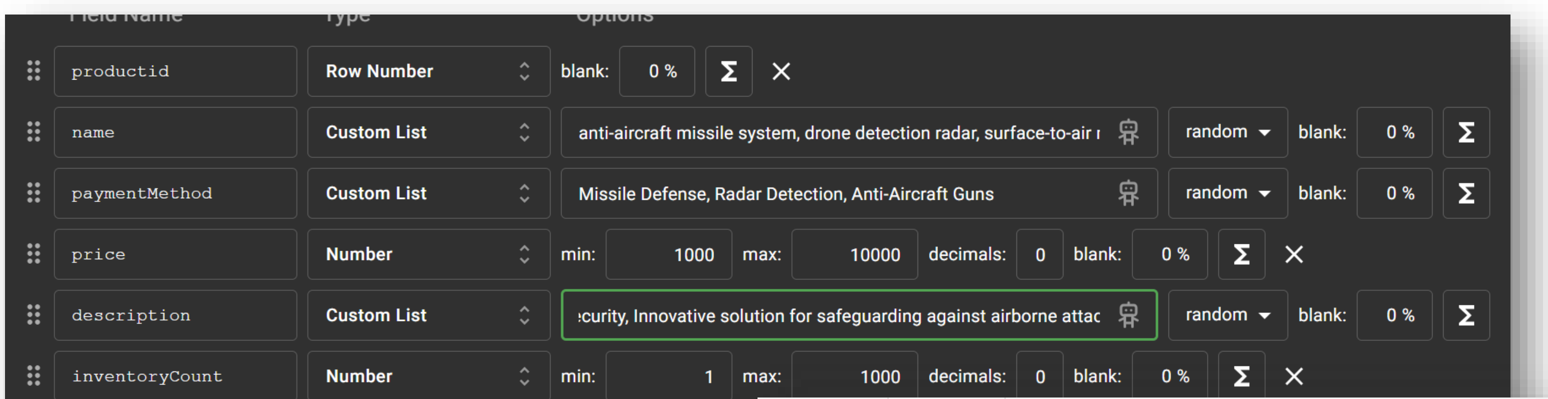
additional Oracle processing, for example: substr(#, 1, 20)

Result Preview

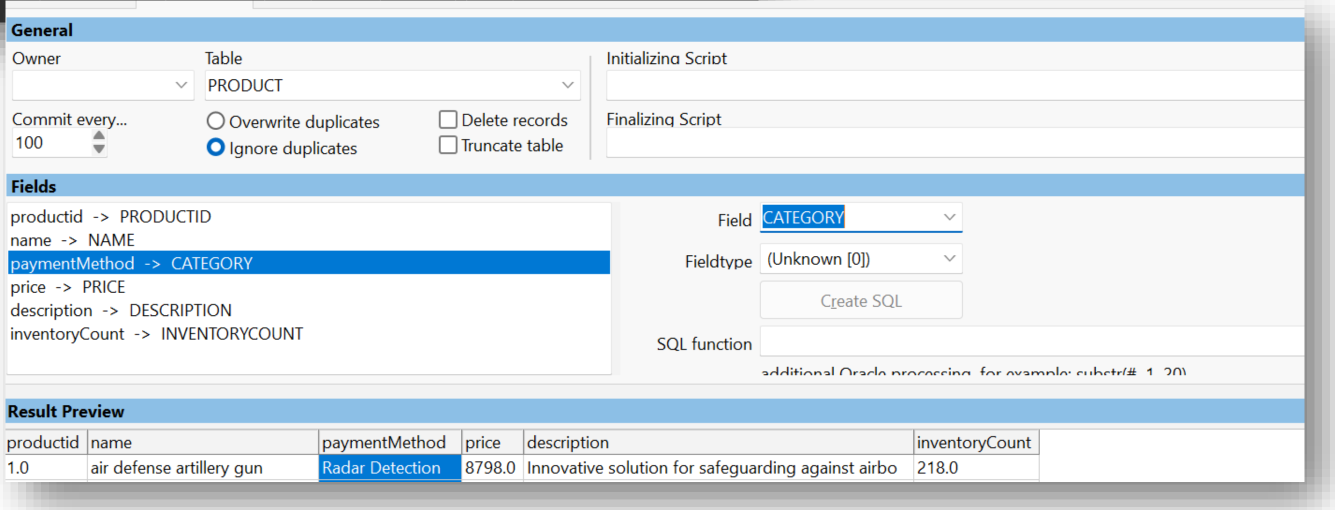
paymentid	paymentDate	paymentMethod	Amount	transictionID	orderID
1.0	15/11/2022	credit card	8439.0	1.0	1.0

EXCEL IMPORT GENERATOR: PRODUCT

LEV & MISSILES
PRECISION, PROTECTION , GLOBAL SECURITY



Field Name	Type	Options
productid	Row Number	blank: 0 %
name	Custom List	anti-aircraft missile system, drone detection radar, surface-to-air r · random · blank: 0 %
paymentMethod	Custom List	Missile Defense, Radar Detection, Anti-Aircraft Guns · random · blank: 0 %
price	Number	min: 1000 max: 10000 decimals: 0 blank: 0 %
description	Custom List	:curity, Innovative solution for safeguarding against airborne attac · random · blank: 0 %
inventoryCount	Number	min: 1 max: 1000 decimals: 0 blank: 0 %



General

Owner:

Table: PRODUCT

Commit every... 100

○ Overwrite duplicates
● Ignore duplicates

□ Delete records
□ Truncate table

Initializing Script

Finalizing Script

Fields

```
productid -> PRODUCTID
name -> NAME
paymentMethod -> CATEGORY
price -> PRICE
description -> DESCRIPTION
inventoryCount -> INVENTORYCOUNT
```

Field: CATEGORY

Fieldtype: (Unknown [0])

SQL function:

additional Oracle processing, for example: substr(#, 1, 20)

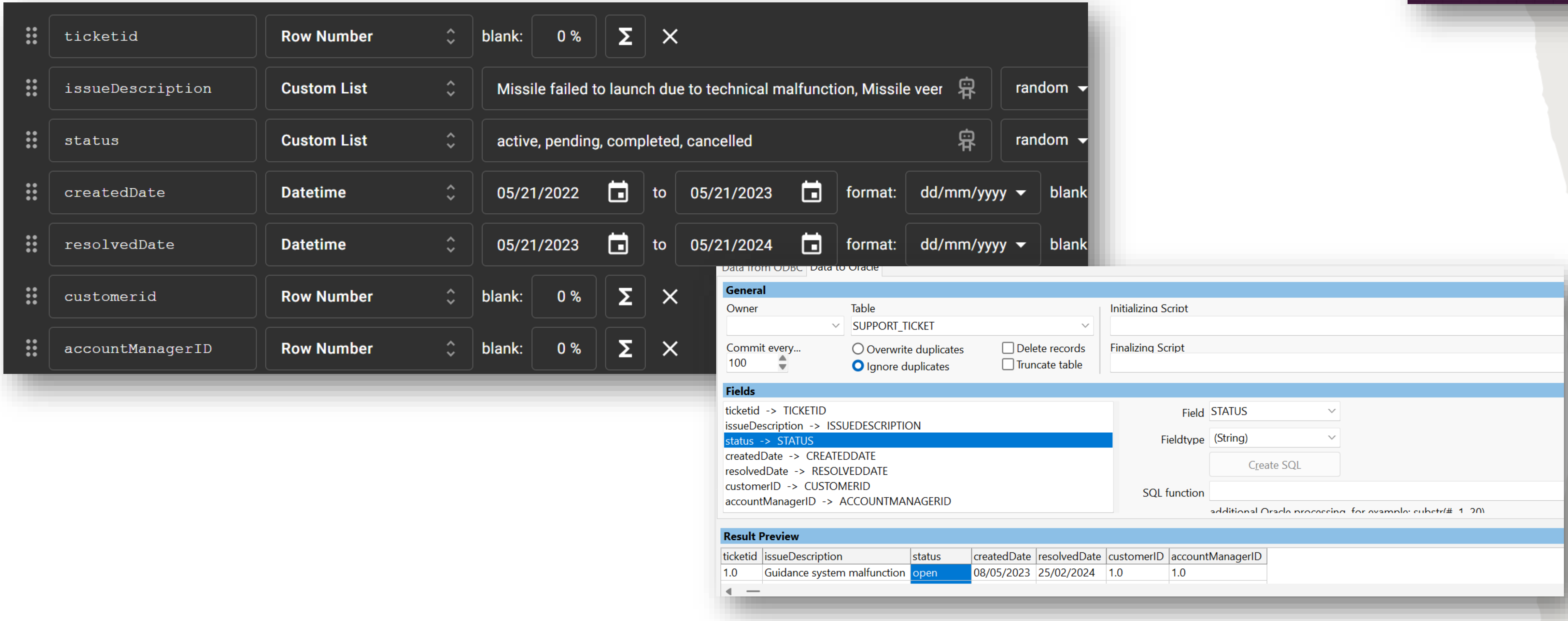
Result Preview

productid	name	paymentMethod	price	description	inventoryCount
1.0	air defense artillery gun	Radar Detection	8798.0	Innovative solution for safeguarding against airbo	218.0

EXCEL IMPORT GENERATOR: SUPPORT TICKET

LEV & MISSILES

PRECISION, PROTECTION , GLOBAL SECURITY



ticketid	Row Number	blank:	0 %	Σ	×
issueDescription	Custom List	Missile failed to launch due to technical malfunction, Missile veer	random		
status	Custom List	active, pending, completed, cancelled	random		
createdDate	Datetime	05/21/2022 to 05/21/2023	format:	dd/mm/yyyy	blank
resolvedDate	Datetime	05/21/2023 to 05/21/2024	format:	dd/mm/yyyy	blank
customerid	Row Number	blank:	0 %	Σ	×
accountManagerID	Row Number	blank:	0 %	Σ	×

Data from ODBC | Data to Oracle

General

Owner:

Table: SUPPORT_TICKET

Commit every... 100

○ Overwrite duplicates
● Ignore duplicates

□ Delete records
□ Truncate table

Initializing Script

Finalizing Script

Fields

```
ticketid  ->  TICKETID
issueDescription  ->  ISSUEDESCRIPTION
status  ->  STATUS
createdDate  ->  CREATEDDATE
resolvedDate  ->  RESOLVEDDATE
customerID  ->  CUSTOMERID
accountManagerID  ->  ACCOUNTMANAGERID
```

Field: STATUS

Fieldtype: (String)

Create SQL

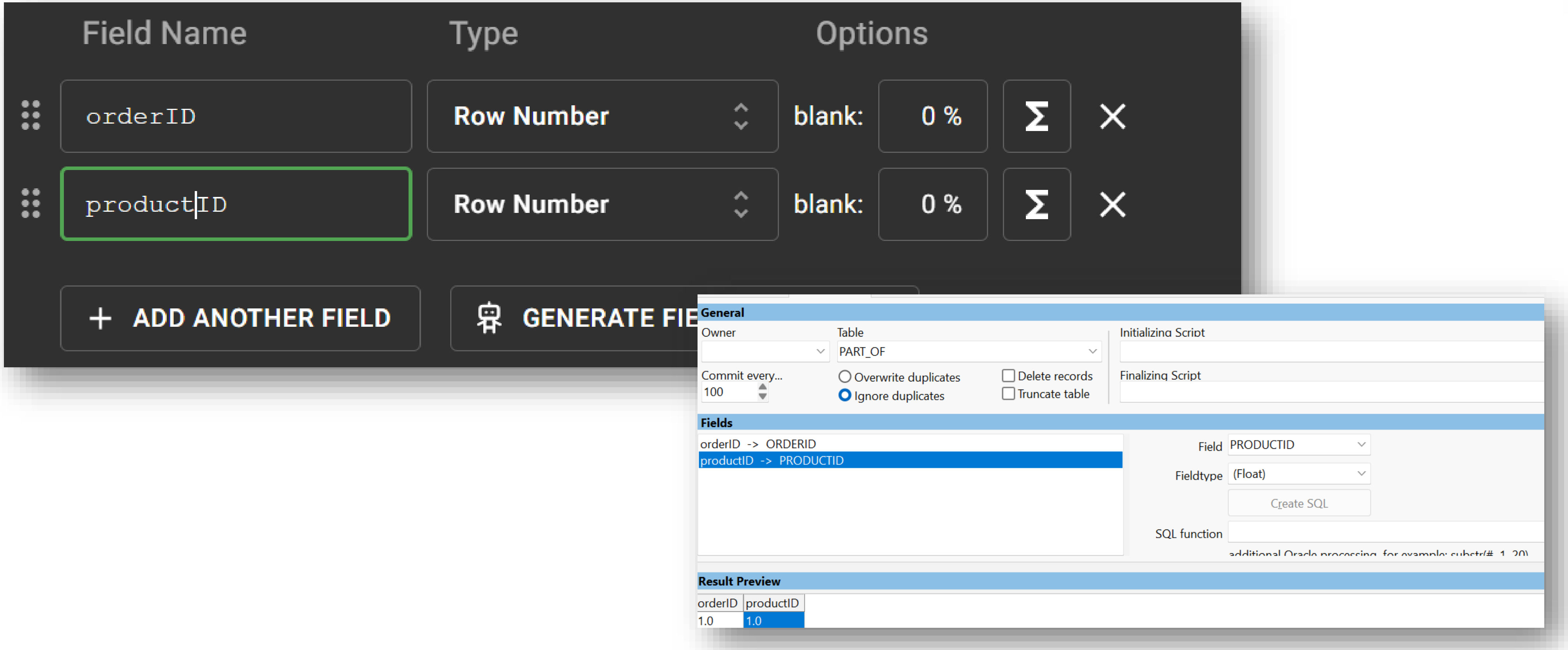
SQL function

additional Oracle processing, for example: substr(#, 1, 20)

Result Preview

ticketid	issueDescription	status	createdDate	resolvedDate	customerID	accountManagerID
1.0	Guidance system malfunction	open	08/05/2023	25/02/2024	1.0	1.0

EXCEL IMPORT GENERATOR:
ORDER & PRODUCT M:N RELATION



Field Name	Type	Options			
orderID	Row Number	blank:	0 %	Σ	✕
productID	Row Number	blank:	0 %	Σ	✕

General

Owner:

Table: PART_OF

Initializing Script:

Commit every...: 100

○ Overwrite duplicates
● Ignore duplicates

□ Delete records
□ Truncate table

Finalizing Script:

Fields

orderID -> ORDERID
productID -> PRODUCTID

Field: PRODUCTID

Fieldtype: (Float)

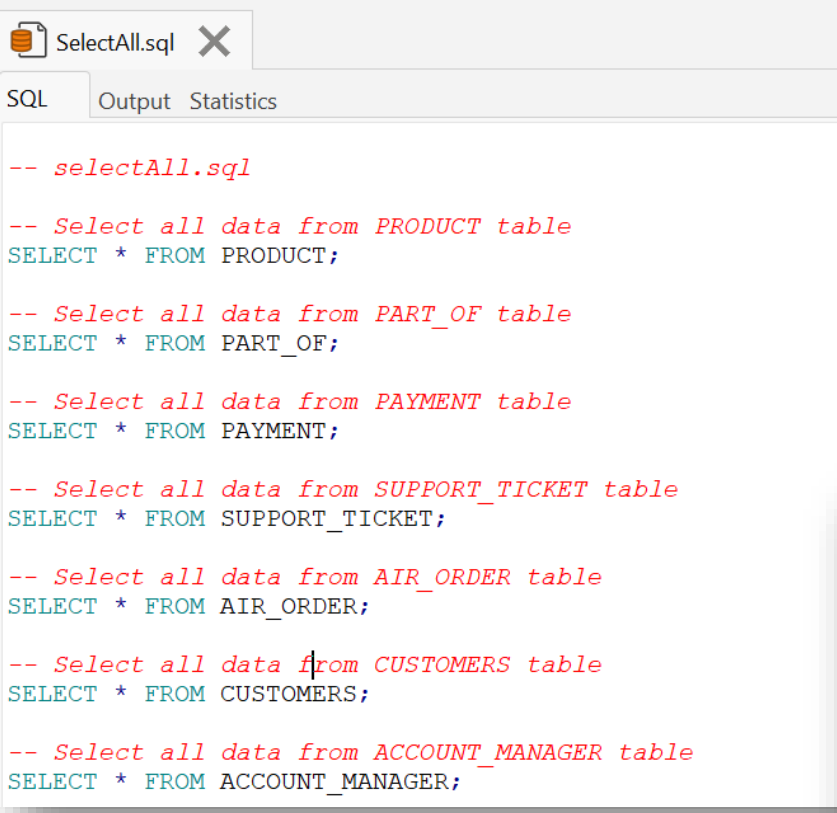
SQL function:

additional Oracle processing, for example: substr(#, 1, 20)

Result Preview

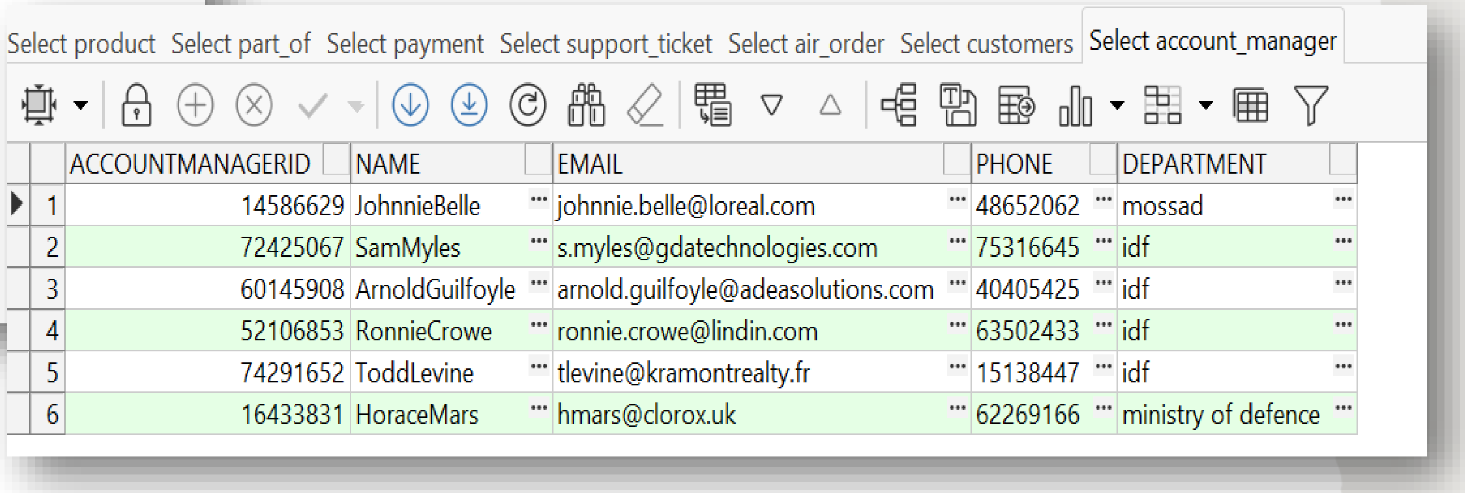
orderID	productID
1.0	1.0

SELECT TABLE SQL: SELECT ALL TABLES



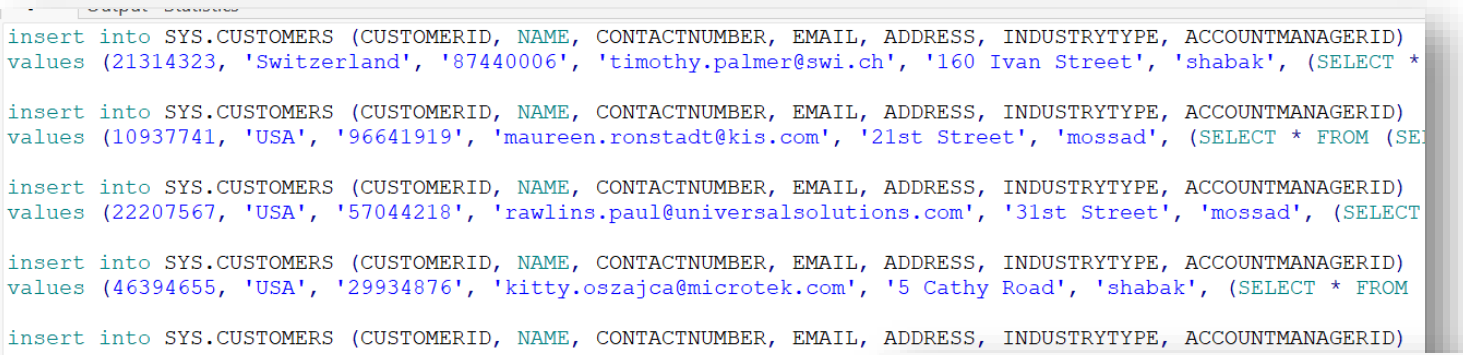
```
-- selectAll.sql

-- Select all data from PRODUCT table
SELECT * FROM PRODUCT;

-- Select all data from PART_OF table
SELECT * FROM PART_OF;

-- Select all data from PAYMENT table
SELECT * FROM PAYMENT;

-- Select all data from SUPPORT_TICKET table
SELECT * FROM SUPPORT_TICKET;

-- Select all data from AIR_ORDER table
SELECT * FROM AIR_ORDER;

-- Select all data from CUSTOMERS table
SELECT * FROM CUSTOMERS;

-- Select all data from ACCOUNT_MANAGER table
SELECT * FROM ACCOUNT_MANAGER;
```

SUCCESSFUL select:



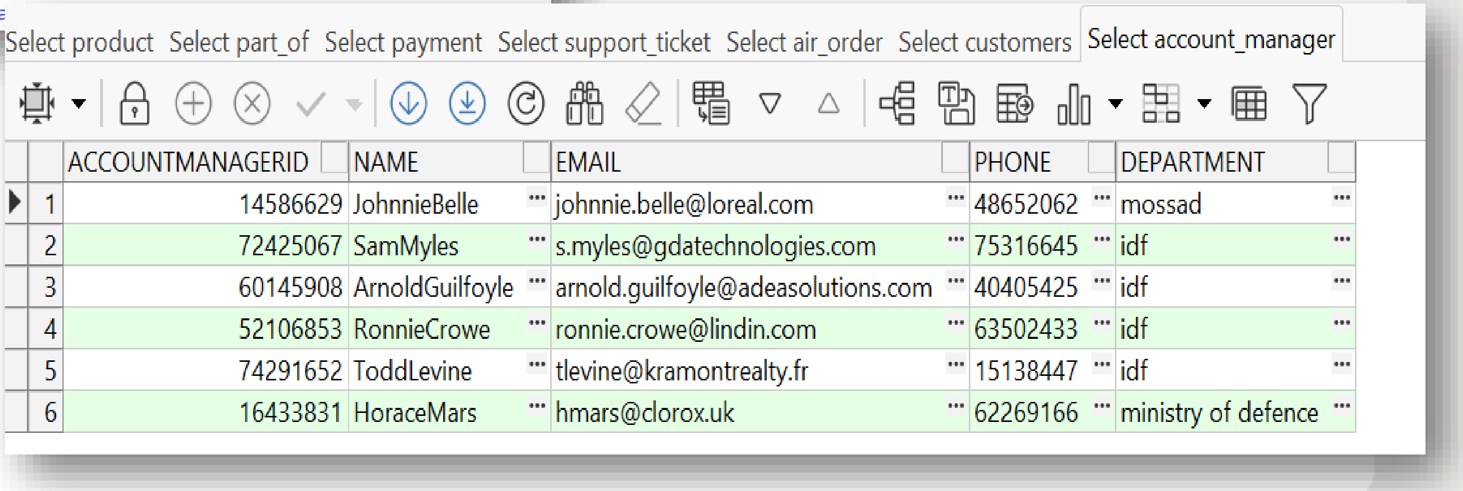
	ACCOUNTMANAGERID	NAME	EMAIL	PHONE	DEPARTMENT
1	14586629	JohnnieBelle	johnnie.belle@loreal.com	48652062	mossad
2	72425067	SamMyles	s.myles@gdatechnologies.com	75316645	idf
3	60145908	ArnoldGuilfoyle	arnold.guilfoyle@adeasolutions.com	40405425	idf
4	52106853	RonnieCrowe	ronnie.crowe@lindin.com	63502433	idf
5	74291652	ToddLevine	tlevine@kramontrealty.fr	15138447	idf
6	16433831	HoraceMars	hmars@clorox.uk	62269166	ministry of defence

INSERT TABLE SQL: INSERT DATA



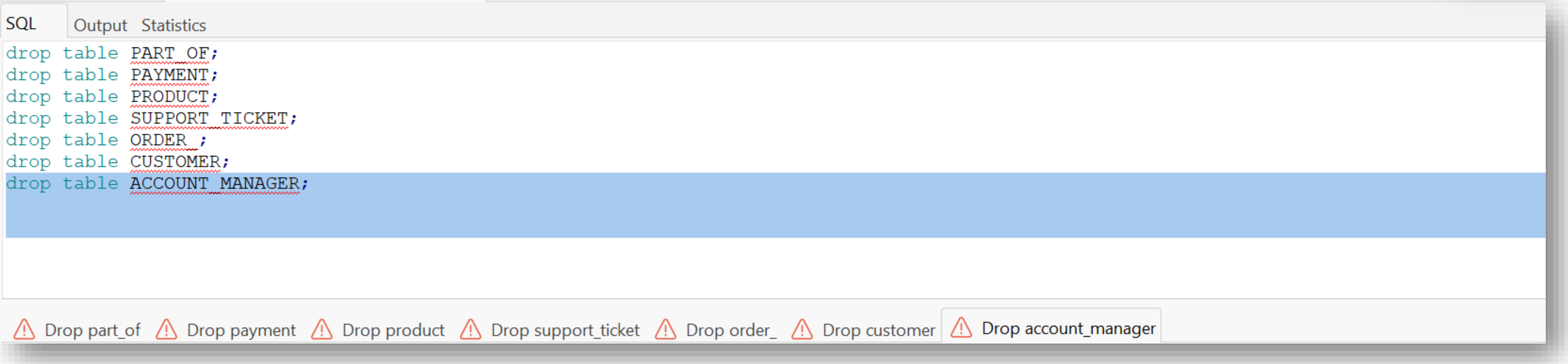
```
insert into SYS.CUSTOMERS (CUSTOMERID, NAME, CONTACTNUMBER, EMAIL, ADDRESS, INDUSTRYTYPE, ACCOUNTMANAGERID)
values (21314323, 'Switzerland', '87440006', 'timothy.palmer@swi.ch', '160 Ivan Street', 'shabak', (SELECT *

insert into SYS.CUSTOMERS (CUSTOMERID, NAME, CONTACTNUMBER, EMAIL, ADDRESS, INDUSTRYTYPE, ACCOUNTMANAGERID)
values (10937741, 'USA', '96641919', 'maureen.ronstadt@kis.com', '21st Street', 'mossad', (SELECT * FROM (SE

insert into SYS.CUSTOMERS (CUSTOMERID, NAME, CONTACTNUMBER, EMAIL, ADDRESS, INDUSTRYTYPE, ACCOUNTMANAGERID)
values (22207567, 'USA', '57044218', 'rawlins.paul@universalsolutions.com', '31st Street', 'mossad', (SELECT

insert into SYS.CUSTOMERS (CUSTOMERID, NAME, CONTACTNUMBER, EMAIL, ADDRESS, INDUSTRYTYPE, ACCOUNTMANAGERID)
values (46394655, 'USA', '29934876', 'kitty.oszajca@microtek.com', '5 Cathy Road', 'shabak', (SELECT * FROM

insert into SYS.CUSTOMERS (CUSTOMERID, NAME, CONTACTNUMBER, EMAIL, ADDRESS, INDUSTRYTYPE, ACCOUNTMANAGERID)
values (86988212, 'USA', '61913632', 'kevn.waits@idas.com', '362 Ca
```

SUCCESSFUL insert:



	ACCOUNTMANAGERID	NAME	EMAIL	PHONE	DEPARTMENT
1	14586629	JohnnieBelle	johnnie.belle@loreal.com	48652062	mossad
2	72425067	SamMyles	s.myles@gdatechnologies.com	75316645	idf
3	60145908	ArnoldGuilfoyle	arnold.guilfoyle@adeasolutions.com	40405425	idf
4	52106853	RonnieCrowe	ronnie.crowe@lindin.com	63502433	idf
5	74291652	ToddLevine	tlevine@kramontrealty.fr	15138447	idf
6	16433831	HoraceMars	hmars@clorox.uk	62269166	ministry of defence

DROP TABLE SQL: DELETE TABLES BY ORDER

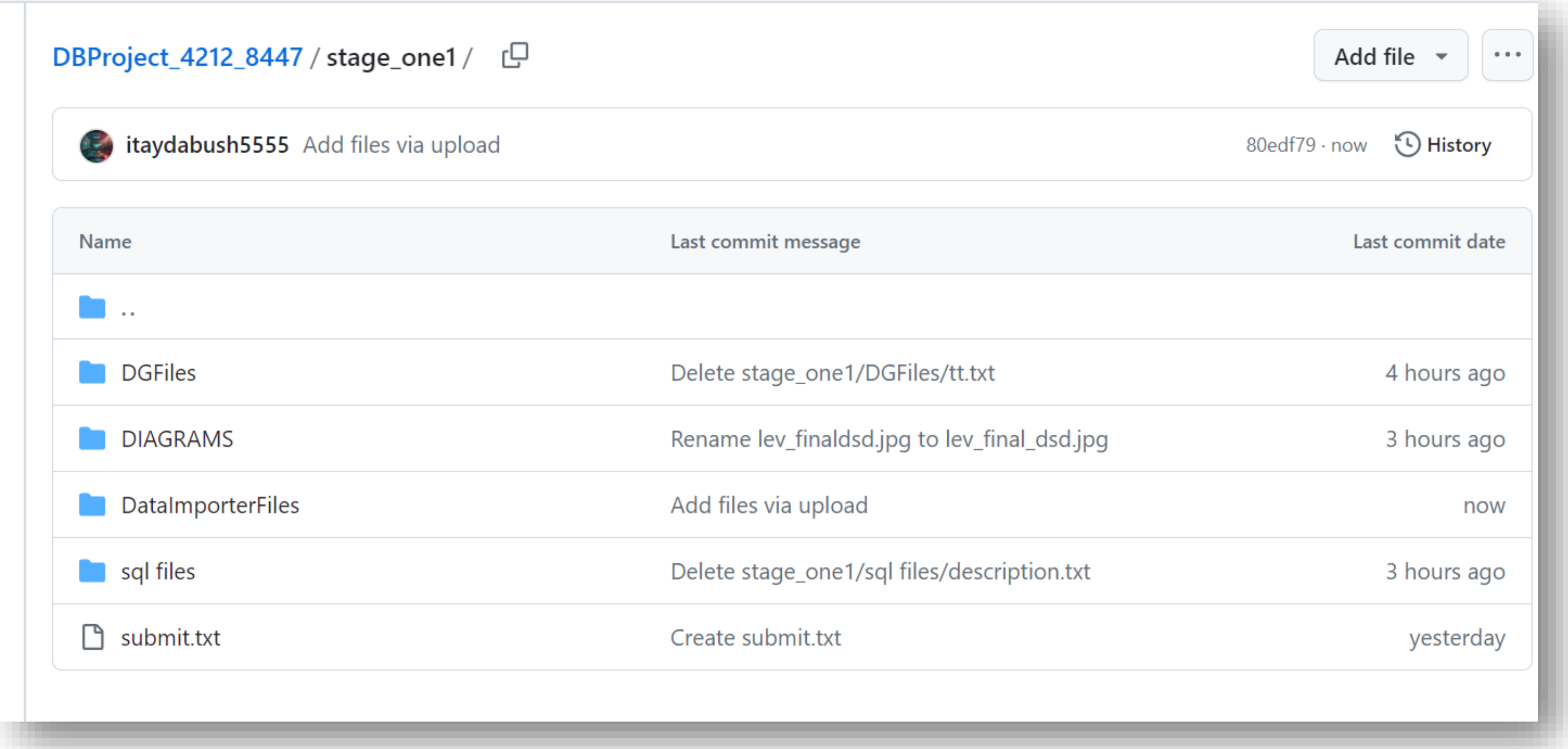


```
drop table PART_OF;
drop table PAYMENT;
drop table PRODUCT;
drop table SUPPORT_TICKET;
drop table ORDER_;
drop table CUSTOMER;
drop table ACCOUNT_MANAGER;
```

SUCCESSFUL DELETE:

First, we need to delete the tables that are not referenced by other tables using their primary key as a foreign key.Then, we need to delete the referenced tables in the correct order, ensuring that we delete the referencing tables before.

GIT EXPLANATION:



DBProject_4212_8447 / stage_one1 /

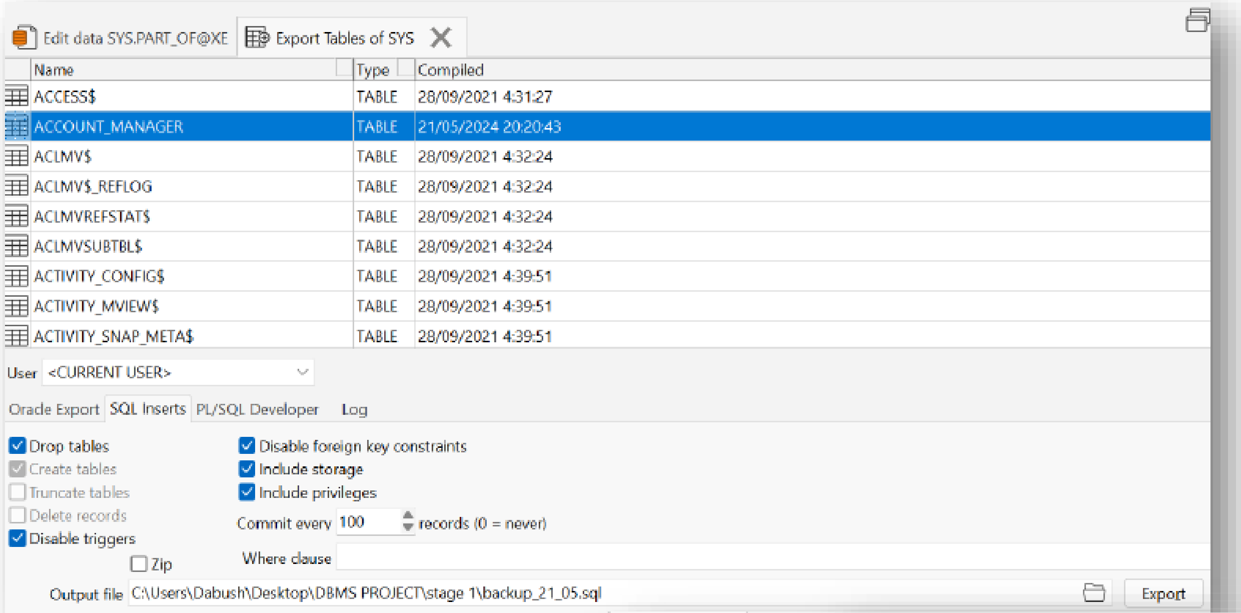
itaydabush5555 Add files via upload 80edf79 · now

Name	Last commit message	Last commit date
..		
DGFiles	Delete stage_one1/DGFiles/tt.txt	4 hours ago
DIAGRAMS	Rename lev_finaldsd.jpg to lev_final_dsd.jpg	3 hours ago
DataImporterFiles	Add files via upload	now
sql files	Delete stage_one1/sql files/description.txt	3 hours ago
submit.txt	Create submit.txt	yesterday

Repository name DBProject_4212_8447:

Directory stage_one1 contains the first level of the project, organized by 4 sub directories-
diagrams,
SQL files,
data import files,
data generator files

EXPORT BACKUP TABLES: SQL INSERT



Name	Type	Compiled
ACCESS$	TABLE	28/09/2021 4:31:27
ACCOUNT_MANAGER	TABLE	21/05/2024 20:20:43
ACLMV$	TABLE	28/09/2021 4:32:24
ACLMV$_REFLOG	TABLE	28/09/2021 4:32:24
ACLMVREFSTAT$	TABLE	28/09/2021 4:32:24
ACLMVSUBTBL$	TABLE	28/09/2021 4:32:24
ACTIVITY_CONFIG$	TABLE	28/09/2021 4:39:51
ACTIVITY_MVIEW$	TABLE	28/09/2021 4:39:51
ACTIVITY_SNAP_META$	TABLE	28/09/2021 4:39:51

User <CURRENT USER>

☑ Drop tables
☑ Create tables
☐ Truncate tables
☐ Delete records
☑ Disable triggers
☐ Zip

☑ Disable foreign key constraints
☑ Include storage
☑ Include privileges
Commit every 100 records (0 = never)
Where clause

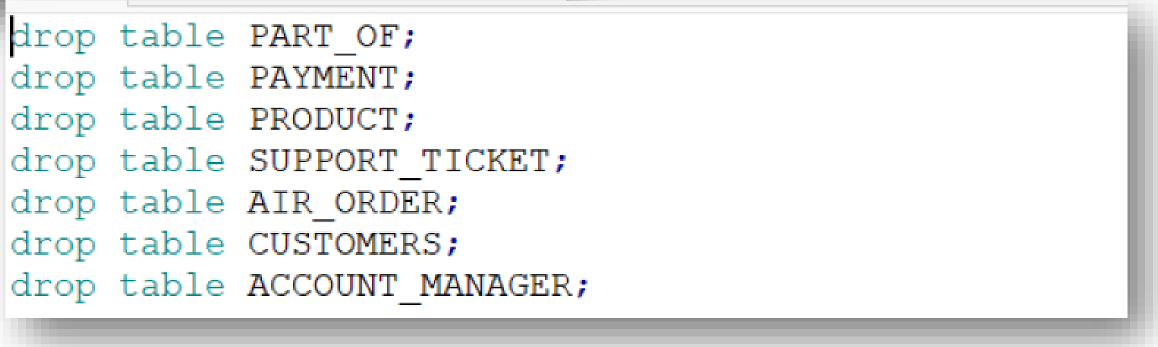
Output file C:\Users\Dabush\Desktop\DBMS PROJECT\stage 1\backup_21_05.sql

3 different ways to export the tables and create backup:

SQL insert

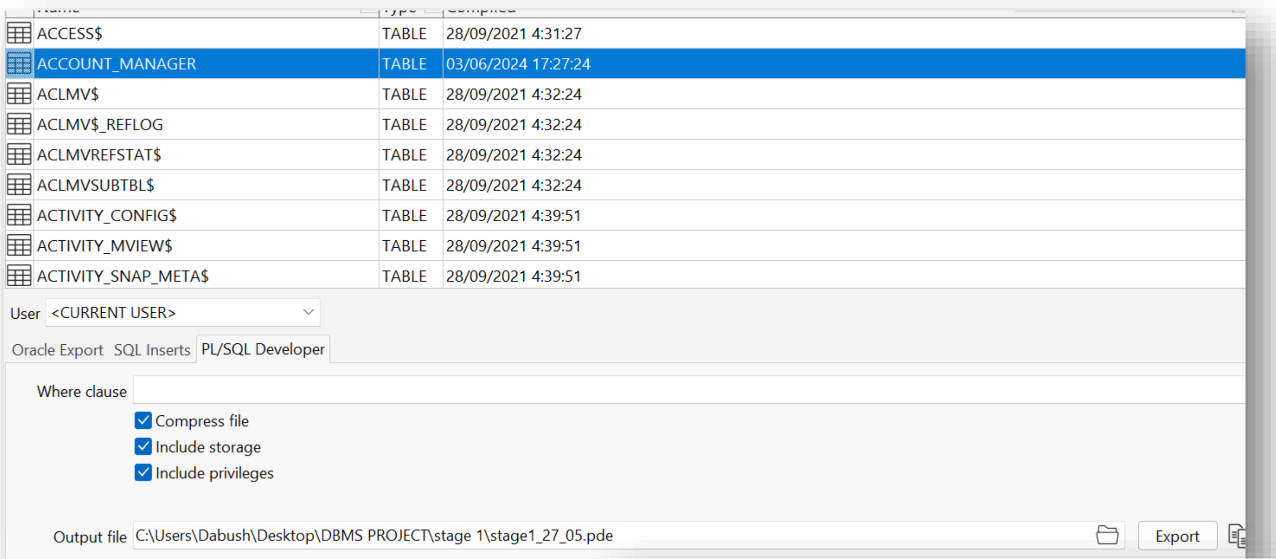
Pl/SQL developer

Oracle export



```
drop table PART_OF;
drop table PAYMENT;
drop table PRODUCT;
drop table SUPPORT_TICKET;
drop table AIR_ORDER;
drop table CUSTOMERS;
drop table ACCOUNT_MANAGER;
```

EXPORT BACKUP TABLES: PL/SQL DEVELOPER



Name	Type	Compiled
ACCESS$	TABLE	28/09/2021 4:31:27
ACCOUNT_MANAGER	TABLE	03/06/2024 17:27:24
ACLMV$	TABLE	28/09/2021 4:32:24
ACLMV$_REFLOG	TABLE	28/09/2021 4:32:24
ACLMVREFSTAT$	TABLE	28/09/2021 4:32:24
ACLMVSUBTBL$	TABLE	28/09/2021 4:32:24
ACTIVITY_CONFIG$	TABLE	28/09/2021 4:39:51
ACTIVITY_MVIEW$	TABLE	28/09/2021 4:39:51
ACTIVITY_SNAP_META$	TABLE	28/09/2021 4:39:51

User <CURRENT USER>

Where clause

☑ Compress file
☑ Include storage
☑ Include privileges

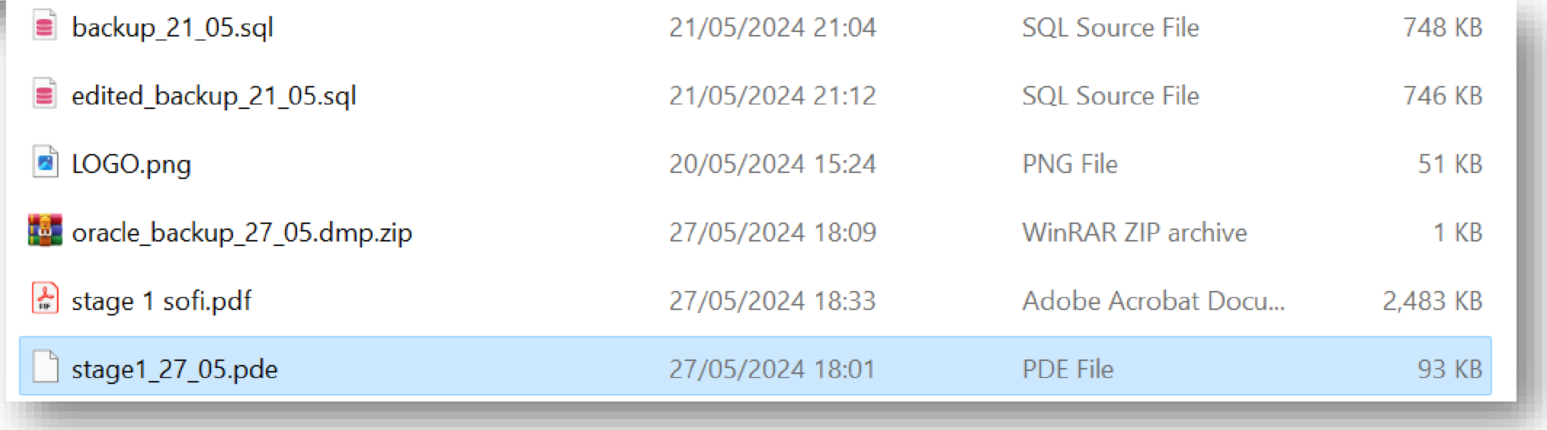
Output file C:\Users\Dabush\Desktop\DBMS PROJECT\stage 1\stage1_27_05.pde

3 different ways to export the tables and create backup:

SQL insert

Pl/SQL developer

Oracle export



backup_21_05.sql	21/05/2024 21:04	SQL Source File	748 KB
edited_backup_21_05.sql	21/05/2024 21:12	SQL Source File	746 KB
LOGO.png	20/05/2024 15:24	PNG File	51 KB
oracle_backup_27_05.dmp.zip	27/05/2024 18:09	WinRAR ZIP archive	1 KB
stage 1 sofi.pdf	27/05/2024 18:33	Adobe Acrobat Docu...	2,483 KB
stage1_27_05.pde	27/05/2024 18:01	PDE File	93 KB

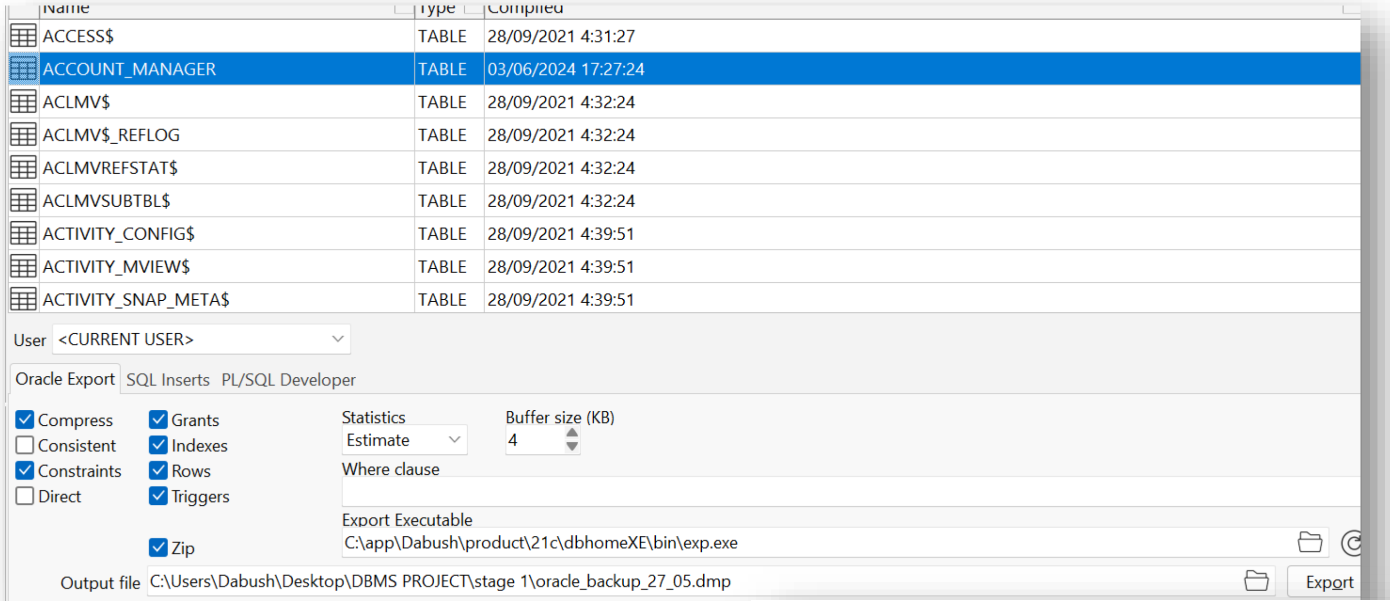
EXPORT BACKUP TABLES: PL/SQL DEVELOPER

3 different ways to export the tables and create backup:

SQL insert

Pl/SQL developer

Oracle export



Name	Type	Compiled
ACCESS$	TABLE	28/09/2021 4:31:27
ACCOUNT_MANAGER	TABLE	03/06/2024 17:27:24
ACLMV$	TABLE	28/09/2021 4:32:24
ACLMV$_REFLOG	TABLE	28/09/2021 4:32:24
ACLMVREFSTAT$	TABLE	28/09/2021 4:32:24
ACLMVSUBTBL$	TABLE	28/09/2021 4:32:24
ACTIVITY_CONFIG$	TABLE	28/09/2021 4:39:51
ACTIVITY_MVIEW$	TABLE	28/09/2021 4:39:51
ACTIVITY_SNAP_META$	TABLE	28/09/2021 4:39:51

User <CURRENT USER>

☑ Compress
☐ Consistent
☑ Constraints
☐ Direct
☑ Grants
☑ Indexes
☑ Rows
☑ Triggers
☑ Zip

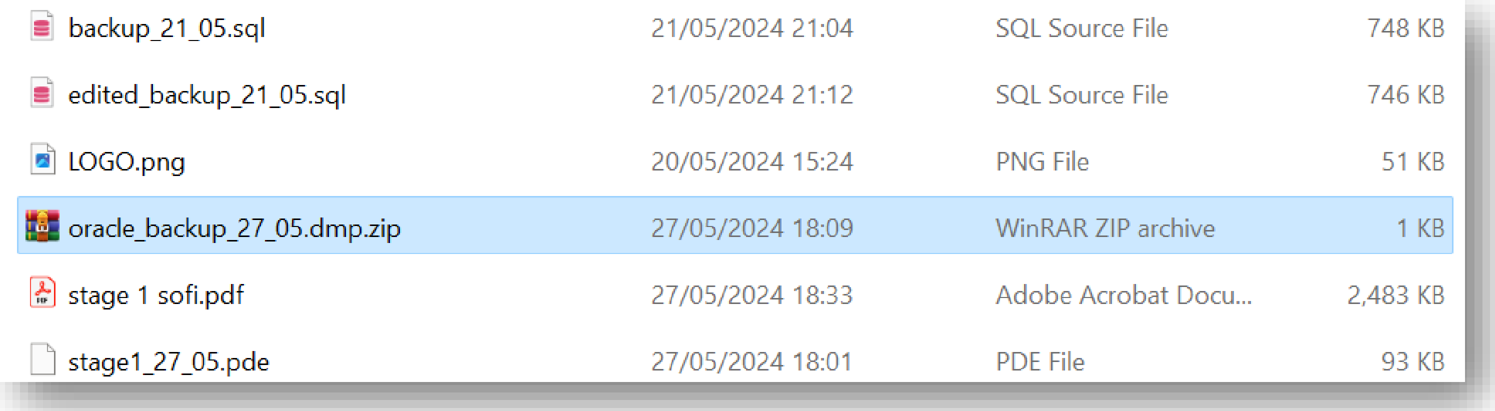
Statistics: Estimate

Buffer size (KB): 4

Where clause:

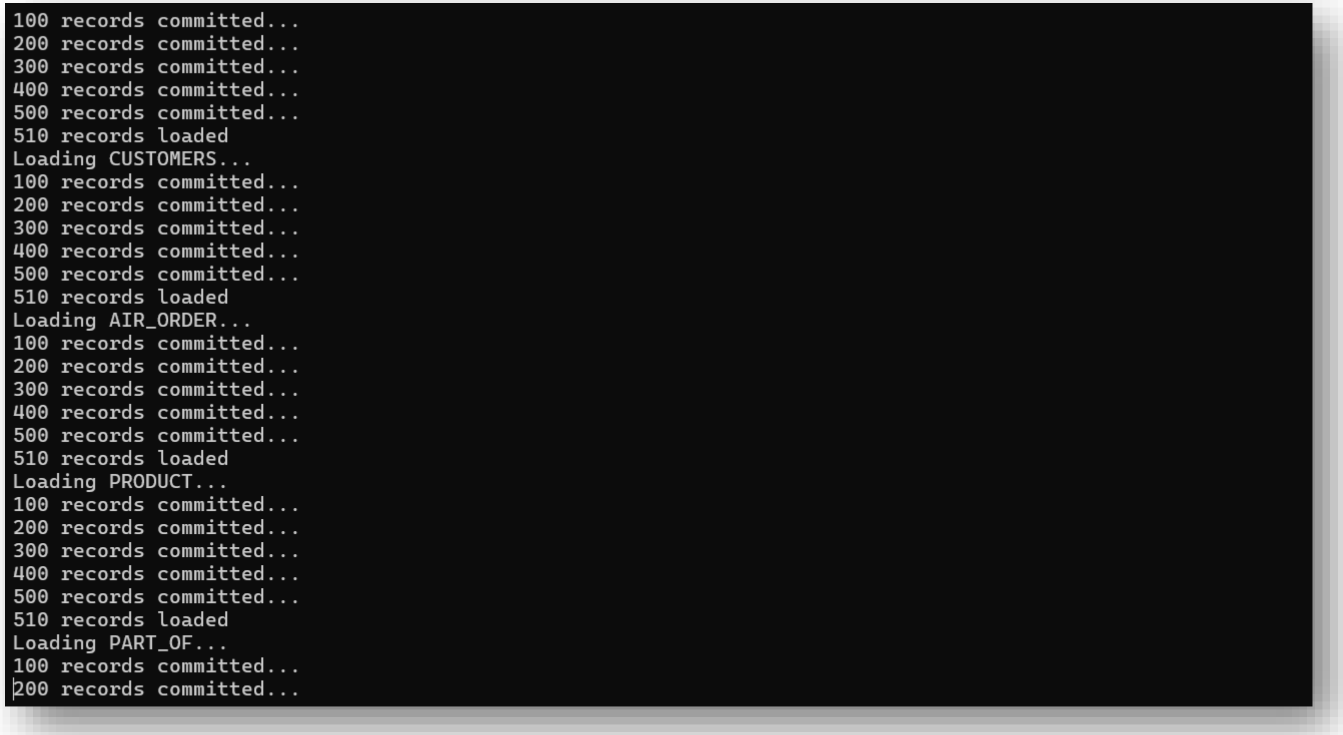
Export Executable: C:\app\Dabush\product\21c\dbhomeXE\bin\exp.exe

Output file: C:\Users\Dabush\Desktop\DBMS PROJECT\stage 1\oracle_backup_27_05.dmp

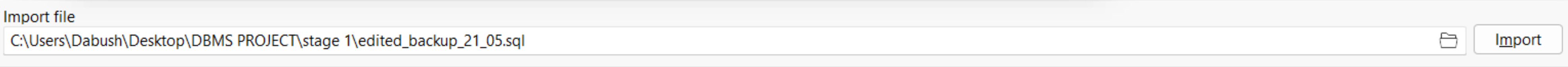


backup_21_05.sql	21/05/2024 21:04	SQL Source File	748 KB
edited_backup_21_05.sql	21/05/2024 21:12	SQL Source File	746 KB
LOGO.png	20/05/2024 15:24	PNG File	51 KB
oracle_backup_27_05.dmp.zip	27/05/2024 18:09	WinRAR ZIP archive	1 KB
stage 1 sofi.pdf	27/05/2024 18:33	Adobe Acrobat Docu...	2,483 KB
stage1_27_05.pde	27/05/2024 18:01	PDE File	93 KB

IMPORT BACKUP TABLES:

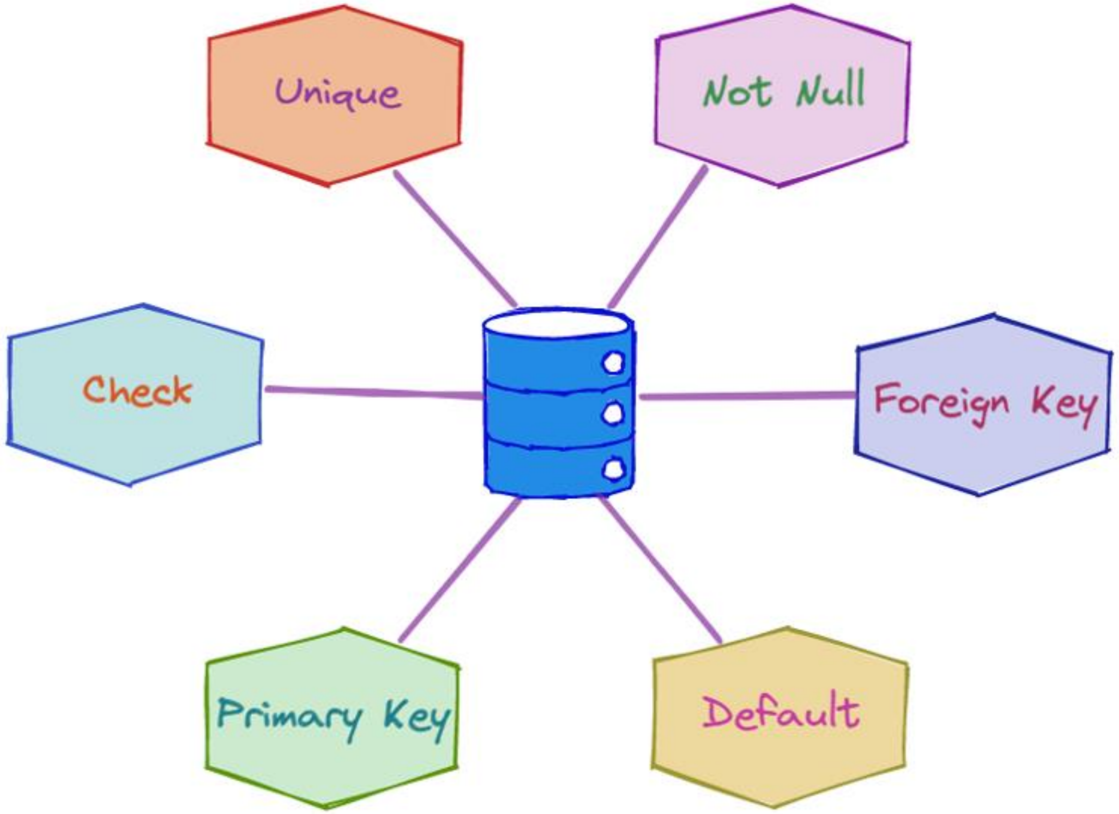


```
100 records committed...
200 records committed...
300 records committed...
400 records committed...
500 records committed...
510 records loaded
Loading CUSTOMERS...
100 records committed...
200 records committed...
300 records committed...
400 records committed...
500 records committed...
510 records loaded
Loading AIR_ORDER...
100 records committed...
200 records committed...
300 records committed...
400 records committed...
500 records committed...
510 records loaded
Loading PRODUCT...
100 records committed...
200 records committed...
300 records committed...
400 records committed...
500 records committed...
510 records loaded
Loading PART_OF...
100 records committed...
200 records committed...
```



Import file
C:\Users\Dabush\Desktop\DBMS PROJECT\stage 1\edited_backup_21_05.sql

STAGE 2- QUERIES AND CONSTRAINTS

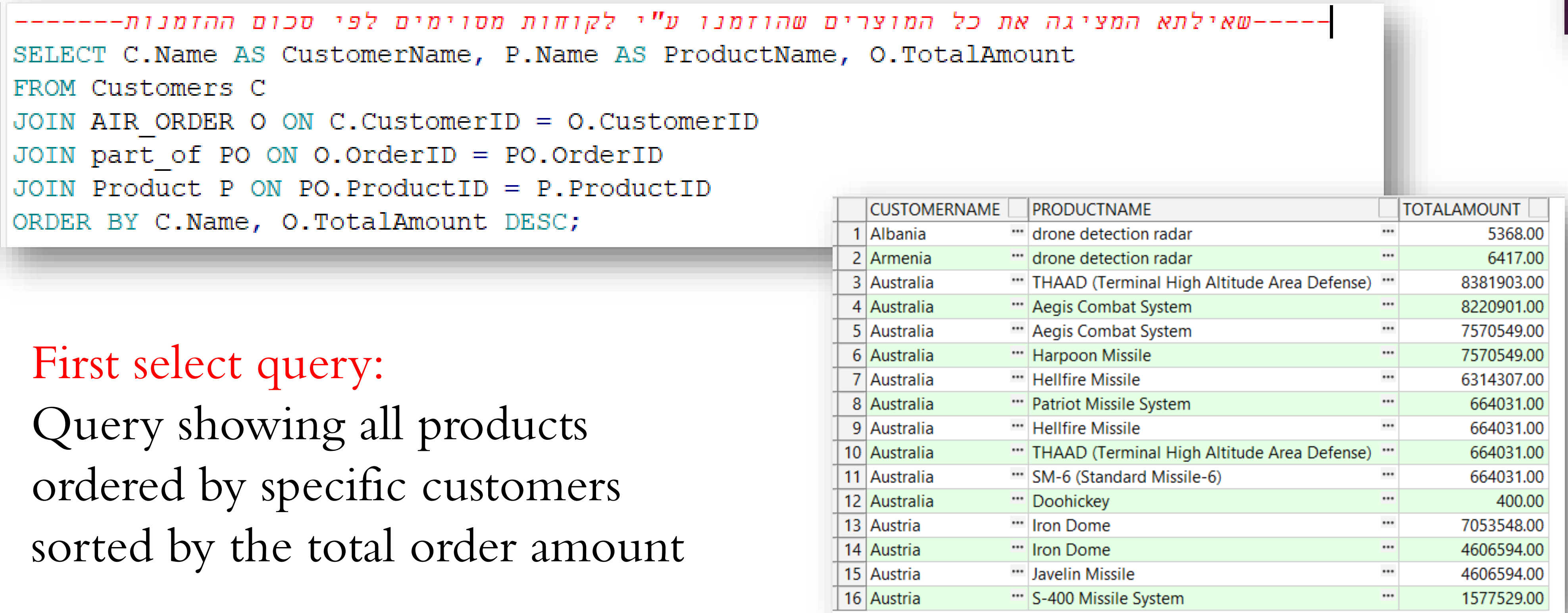


STAGE 2- QUERIES AND CONSTRAINTS

In this stage of the project, we focus on writing complex SQL queries, updating tables using `ALTER TABLE` commands, and adding constraints to improve data integrity.

The goal is to ensure our database is **flexible**, **efficient**, and **reliable**, allowing us to retrieve important and complex information accurately and quickly. These actions help enhance the data structure, ensuring the information managed within the system is of high quality and supports various user requirements.

SELECT QUERIES: FIRST QUERY



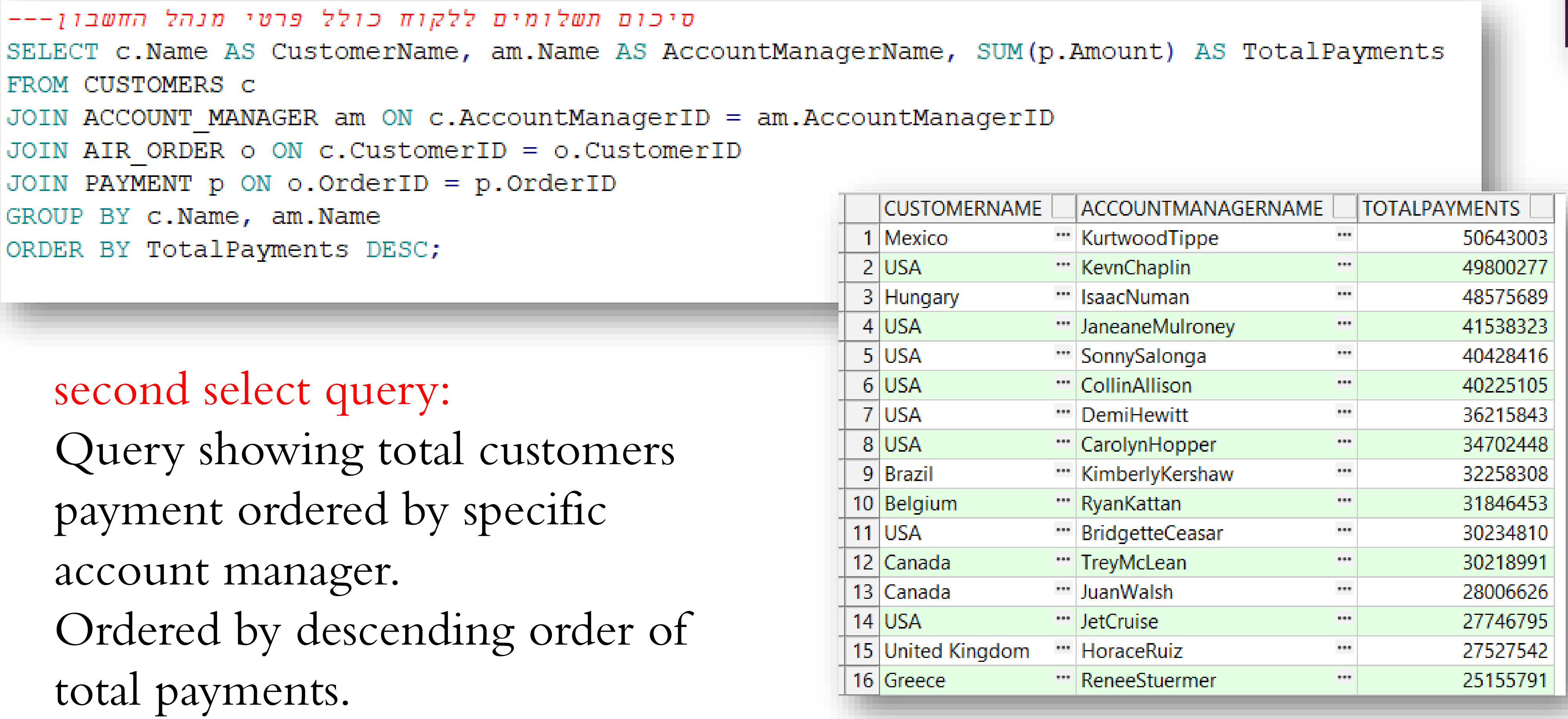
```
-----שאילתא המציגה את כל המוצרים שהוזמנו ע"י לקוחות מסוימים לפי סכום ההזמנות-------
SELECT C.Name AS CustomerName, P.Name AS ProductName, O.TotalAmount
FROM Customers C
JOIN AIR_ORDER O ON C.CustomerID = O.CustomerID
JOIN part_of PO ON O.OrderID = PO.OrderID
JOIN Product P ON PO.ProductID = P.ProductID
ORDER BY C.Name, O.TotalAmount DESC;
```

	CUSTOMERNAME	PRODUCTNAME	TOTALAMOUNT
1	Albania	drone detection radar	5368.00
2	Armenia	drone detection radar	6417.00
3	Australia	THAAD (Terminal High Altitude Area Defense)	8381903.00
4	Australia	Aegis Combat System	8220901.00
5	Australia	Aegis Combat System	7570549.00
6	Australia	Harpoon Missile	7570549.00
7	Australia	Hellfire Missile	6314307.00
8	Australia	Patriot Missile System	664031.00
9	Australia	Hellfire Missile	664031.00
10	Australia	THAAD (Terminal High Altitude Area Defense)	664031.00
11	Australia	SM-6 (Standard Missile-6)	664031.00
12	Australia	Doohickey	400.00
13	Austria	Iron Dome	7053548.00
14	Austria	Iron Dome	4606594.00
15	Austria	Javelin Missile	4606594.00
16	Austria	S-400 Missile System	1577529.00

First select query:

Query showing all products ordered by specific customers sorted by the total order amount

SELECT QUERIES: SECOND QUERY



```
---סיכום תשלומים ללקוח כולל פרטי מנהל החשבון
SELECT c.Name AS CustomerName, am.Name AS AccountManagerName, SUM(p.Amount) AS TotalPayments
FROM CUSTOMERS c
JOIN ACCOUNT_MANAGER am ON c.AccountManagerID = am.AccountManagerID
JOIN AIR_ORDER o ON c.CustomerID = o.CustomerID
JOIN PAYMENT p ON o.OrderID = p.OrderID
GROUP BY c.Name, am.Name
ORDER BY TotalPayments DESC;
```

	CUSTOMERNAME	ACCOUNTMANAGERNAME	TOTALPAYMENTS
1	Mexico	KurtwoodTippe	50643003
2	USA	KevnChaplin	49800277
3	Hungary	IsaacNuman	48575689
4	USA	JaneaneMulroney	41538323
5	USA	SonnySalonga	40428416
6	USA	CollinAllison	40225105
7	USA	DemiHewitt	36215843
8	USA	CarolynHopper	34702448
9	Brazil	KimberlyKershaw	32258308
10	Belgium	RyanKattan	31846453
11	USA	BridgetteCeasar	30234810
12	Canada	TreyMcLean	30218991
13	Canada	JuanWalsh	28006626
14	USA	JetCruise	27746795
15	United Kingdom	HoraceRuiz	27527542
16	Greece	ReneeStuermer	25155791

second select query:

Query showing total customers payment ordered by specific account manager.

Ordered by descending order of total payments.

SELECT QUERIES: THIRD QUERY

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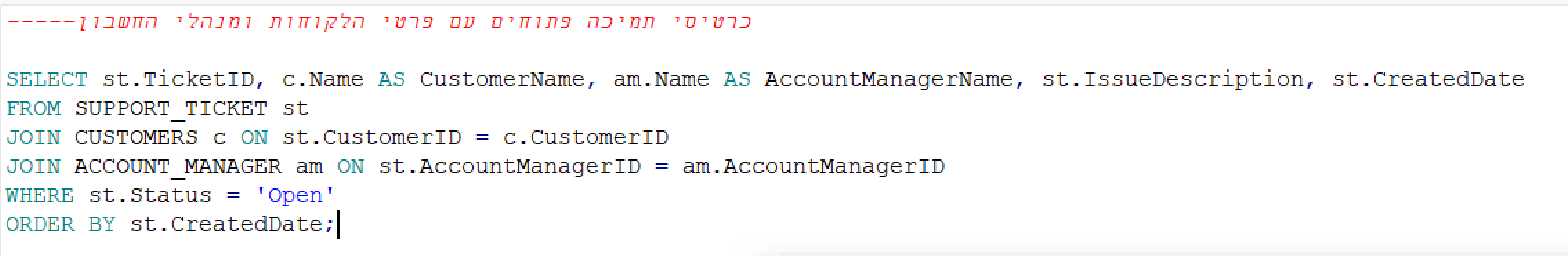
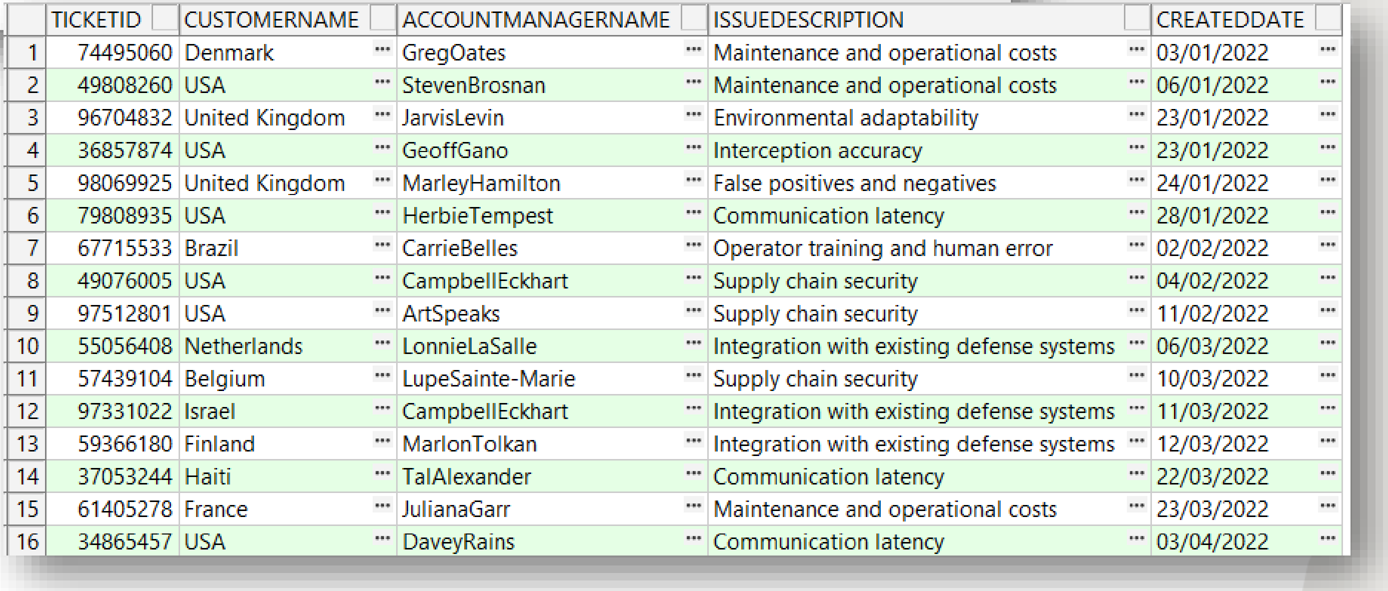
PRECISION, PROTECTION , GLOBAL SECURITY



```
-----כרטיסי תמיכה פתוחים עם פרטי הלקוחות ומנהלי החשבון

SELECT st.TicketID, c.Name AS CustomerName, am.Name AS AccountManagerName, st.IssueDescription, st.CreatedDate
FROM SUPPORT_TICKET st
JOIN CUSTOMERS c ON st.CustomerID = c.CustomerID
JOIN ACCOUNT_MANAGER am ON st.AccountManagerID = am.AccountManagerID
WHERE st.Status = 'Open'
ORDER BY st.CreatedDate;
```

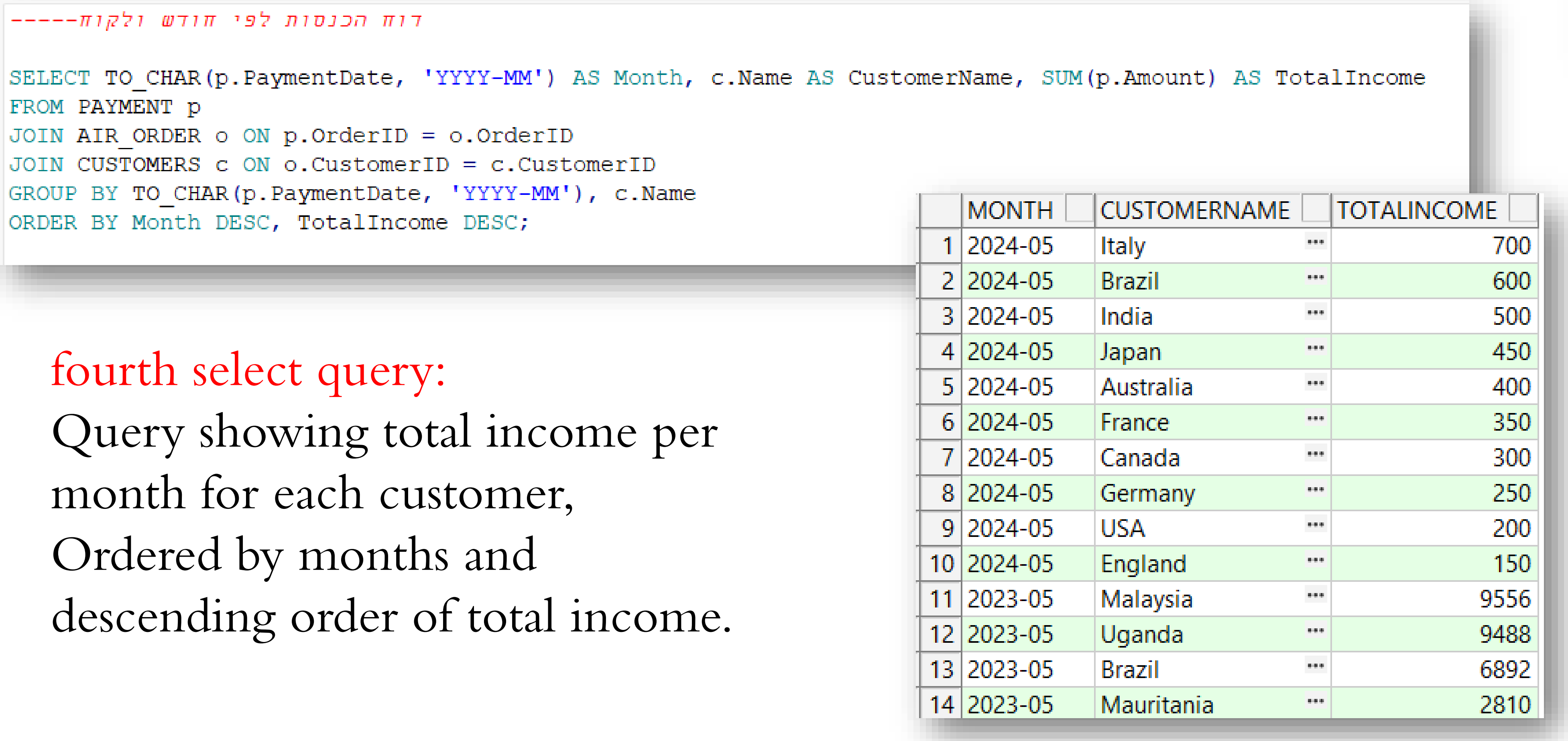


	TICKETID	CUSTOMERNAME	ACCOUNTMANAGERNAME	ISSUEDESCRIPTION	CREATEDDATE
1	74495060	Denmark	GregOates	Maintenance and operational costs	03/01/2022
2	49808260	USA	StevenBrosnan	Maintenance and operational costs	06/01/2022
3	96704832	United Kingdom	JarvisLevin	Environmental adaptability	23/01/2022
4	36857874	USA	GeoffGano	Interception accuracy	23/01/2022
5	98069925	United Kingdom	MarleyHamilton	False positives and negatives	24/01/2022
6	79808935	USA	HerbieTempest	Communication latency	28/01/2022
7	67715533	Brazil	CarrieBelles	Operator training and human error	02/02/2022
8	49076005	USA	CampbellEckhart	Supply chain security	04/02/2022
9	97512801	USA	ArtSpeaks	Supply chain security	11/02/2022
10	55056408	Netherlands	LonnieLaSalle	Integration with existing defense systems	06/03/2022
11	57439104	Belgium	LupeSainte-Marie	Supply chain security	10/03/2022
12	97331022	Israel	CampbellEckhart	Integration with existing defense systems	11/03/2022
13	59366180	Finland	MarlonTolkan	Integration with existing defense systems	12/03/2022
14	37053244	Haiti	TalAlexander	Communication latency	22/03/2022
15	61405278	France	JulianaGarr	Maintenance and operational costs	23/03/2022
16	34865457	USA	DaveyRains	Communication latency	03/04/2022

third select query:

Query showing open support tickets, with customers and account manager information. Ordered by support ticket creation date.

SELECT QUERIES: FOURTH QUERY



```
-----דוח הכנסות לפי חודש ולקוח

SELECT TO_CHAR(p.PaymentDate, 'YYYY-MM') AS Month, c.Name AS CustomerName, SUM(p.Amount) AS TotalIncome
FROM PAYMENT p
JOIN AIR_ORDER o ON p.OrderID = o.OrderID
JOIN CUSTOMERS c ON o.CustomerID = c.CustomerID
GROUP BY TO_CHAR(p.PaymentDate, 'YYYY-MM'), c.Name
ORDER BY Month DESC, TotalIncome DESC;
```

	MONTH	CUSTOMERNAME	TOTALINCOME
1	2024-05	Italy	700
2	2024-05	Brazil	600
3	2024-05	India	500
4	2024-05	Japan	450
5	2024-05	Australia	400
6	2024-05	France	350
7	2024-05	Canada	300
8	2024-05	Germany	250
9	2024-05	USA	200
10	2024-05	England	150
11	2023-05	Malaysia	9556
12	2023-05	Uganda	9488
13	2023-05	Brazil	6892
14	2023-05	Mauritania	2810

fourth select query:
Query showing total income per month for each customer,
Ordered by months and descending order of total income.

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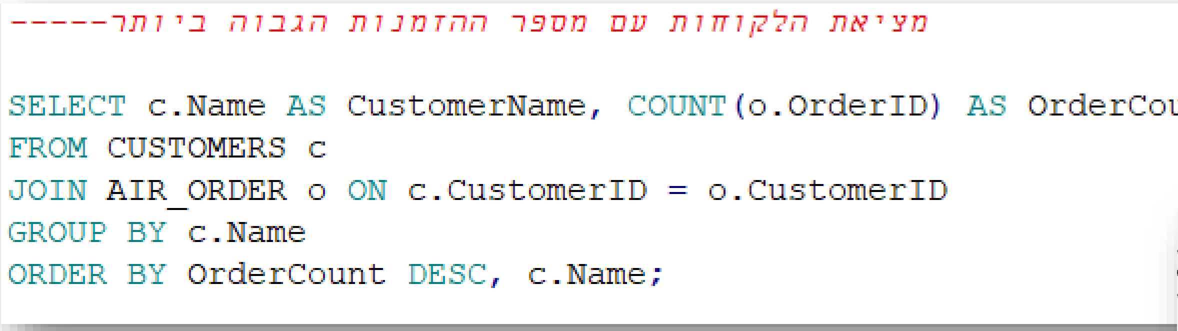
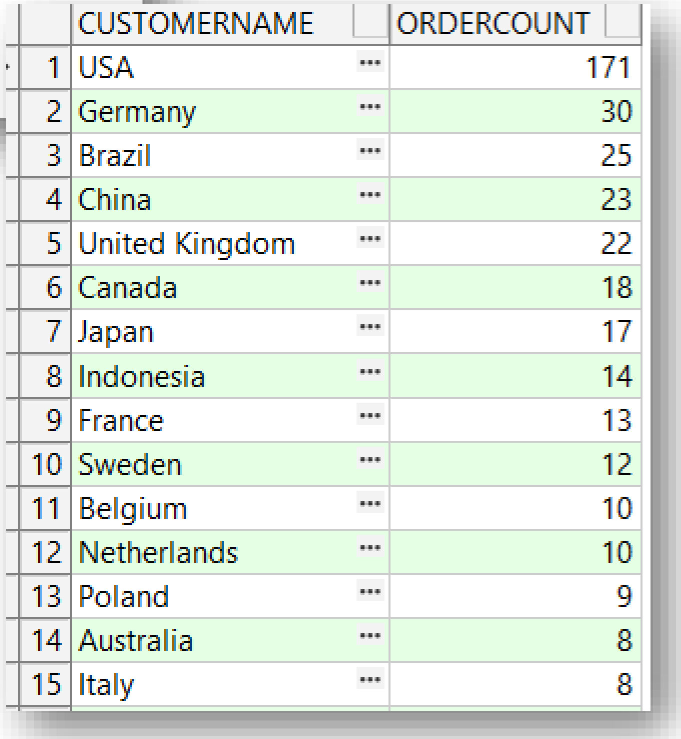
SELECT QUERIES: BONUS QUERY



```
-----מציאת הלקוחות עם מספר ההזמנות הגבוה ביותר

SELECT c.Name AS CustomerName, COUNT(o.OrderID) AS OrderCount
FROM CUSTOMERS c
JOIN AIR_ORDER o ON c.CustomerID = o.CustomerID
GROUP BY c.Name
ORDER BY OrderCount DESC, c.Name;
```



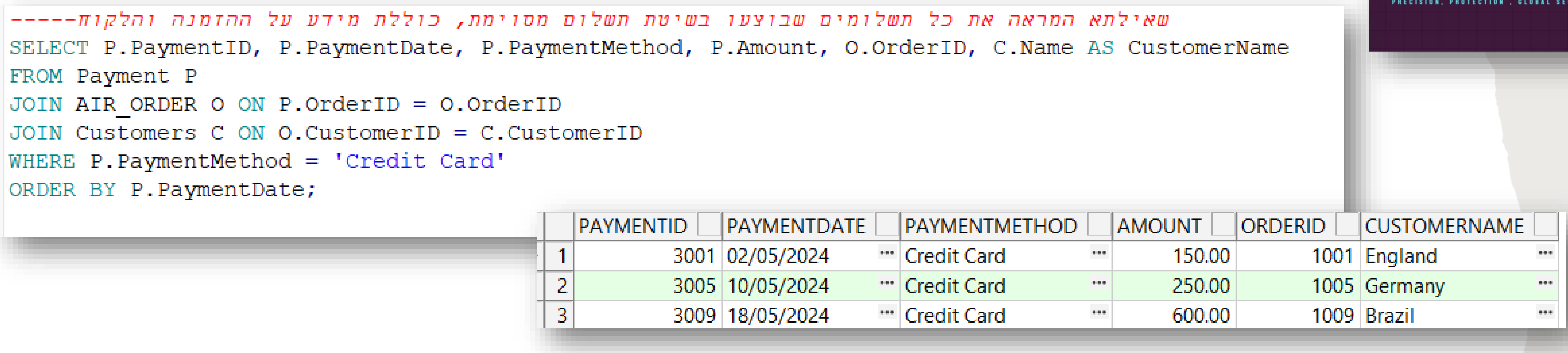
	CUSTOMERNAME	ORDERCOUNT
1	USA	171
2	Germany	30
3	Brazil	25
4	China	23
5	United Kingdom	22
6	Canada	18
7	Japan	17
8	Indonesia	14
9	France	13
10	Sweden	12
11	Belgium	10
12	Netherlands	10
13	Poland	9
14	Australia	8
15	Italy	8

bonus select query:

Query showing customers with the most orders.

descending order of total orders count.

SELECT QUERIES: BONUS QUERY



```sql
-----שאילתא המראה את כל תשלומים שבוצעו בשיטת תשלום מסוימת, כוללת מידע על ההזמנה והלקוח
SELECT P.PaymentID, P.PaymentDate, P.PaymentMethod, P.Amount, O.OrderID, C.Name AS CustomerName
FROM Payment P
JOIN AIR_ORDER O ON P.OrderID = O.OrderID
JOIN Customers C ON O.CustomerID = C.CustomerID
WHERE P.PaymentMethod = 'Credit Card'
ORDER BY P.PaymentDate;
```

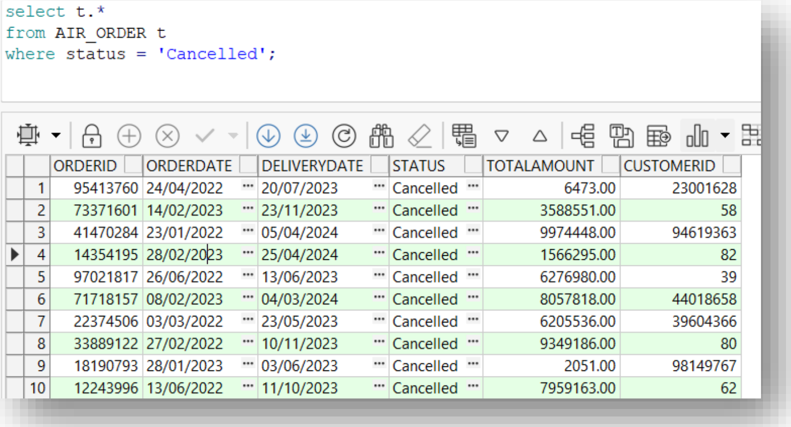
	PAYMENTID	PAYMENTDATE	PAYMENTMETHOD	AMOUNT	ORDERID	CUSTOMERNAME
1	3001	02/05/2024	Credit Card	150.00	1001	England
2	3005	10/05/2024	Credit Card	250.00	1005	Germany
3	3009	18/05/2024	Credit Card	600.00	1009	Brazil

bonus select query:

Query showing all payments made with a specific payment method, including order and customer information

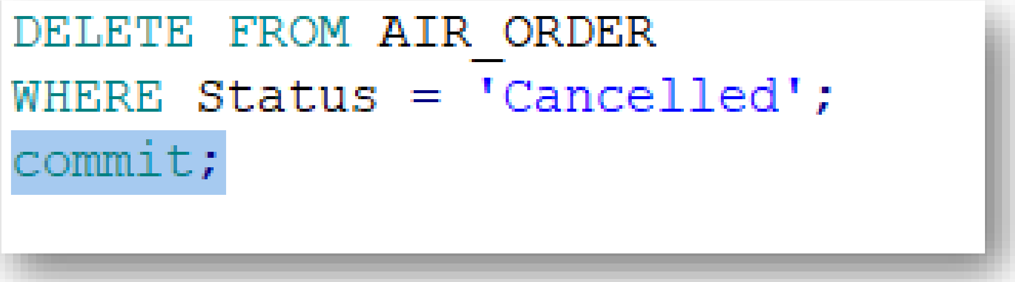
DELETE QUERIES: FIRST QUERY

Before:



```
select t.*
from AIR_ORDER t
where status = 'Cancelled';
```

		ORDERID	ORDERDATE	DELIVERYDATE	STATUS	TOTALAMOUNT	CUSTOMERID
	1	95413760	24/04/2022	20/07/2023	Cancelled	6473.00	23001628
	2	73371601	14/02/2023	23/11/2023	Cancelled	3588551.00	58
	3	41470284	23/01/2022	05/04/2024	Cancelled	9974448.00	94619363
▶	4	14354195	28/02/2023	25/04/2024	Cancelled	1566295.00	82
	5	97021817	26/06/2022	13/06/2023	Cancelled	6276980.00	39
	6	71718157	08/02/2023	04/03/2024	Cancelled	8057818.00	44018658
	7	22374506	03/03/2022	23/05/2023	Cancelled	6205536.00	39604366
	8	33889122	27/02/2022	10/11/2023	Cancelled	9349186.00	80
	9	18190793	28/01/2023	03/06/2023	Cancelled	2051.00	98149767
	10	12243996	13/06/2022	11/10/2023	Cancelled	7959163.00	62



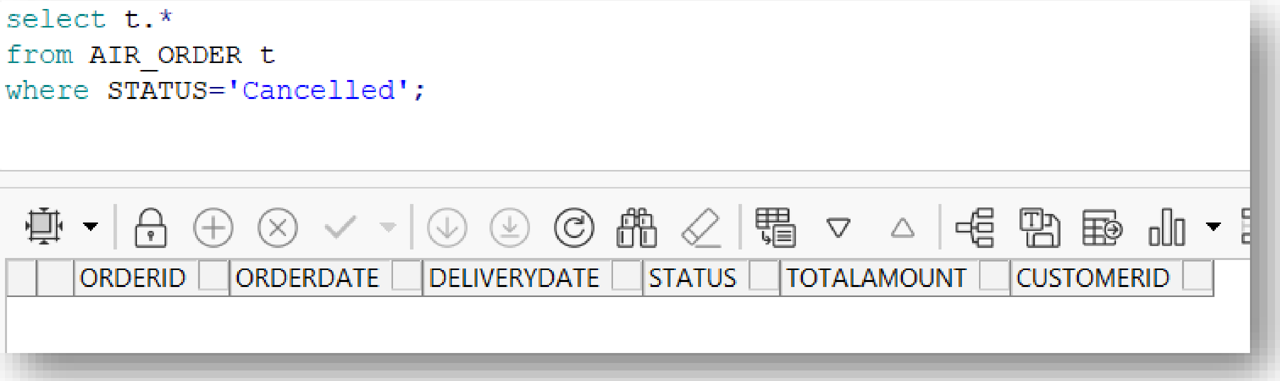
```
DELETE FROM AIR_ORDER
WHERE Status = 'Cancelled';
commit;
```

First delete query:

Query deletes orders that got cancelled from the air order table.

השאילתא מוחקת את כל ההזמנות
שהתבטלו מטבלת ההזמנות

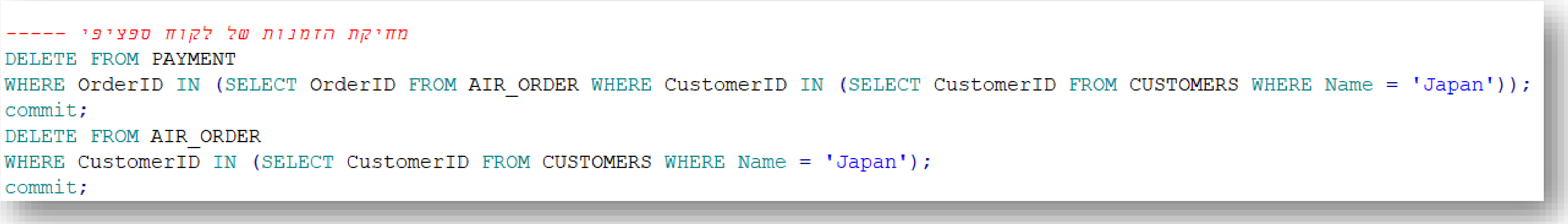
After:



```
select t.*
from AIR_ORDER t
where STATUS='Cancelled';
```

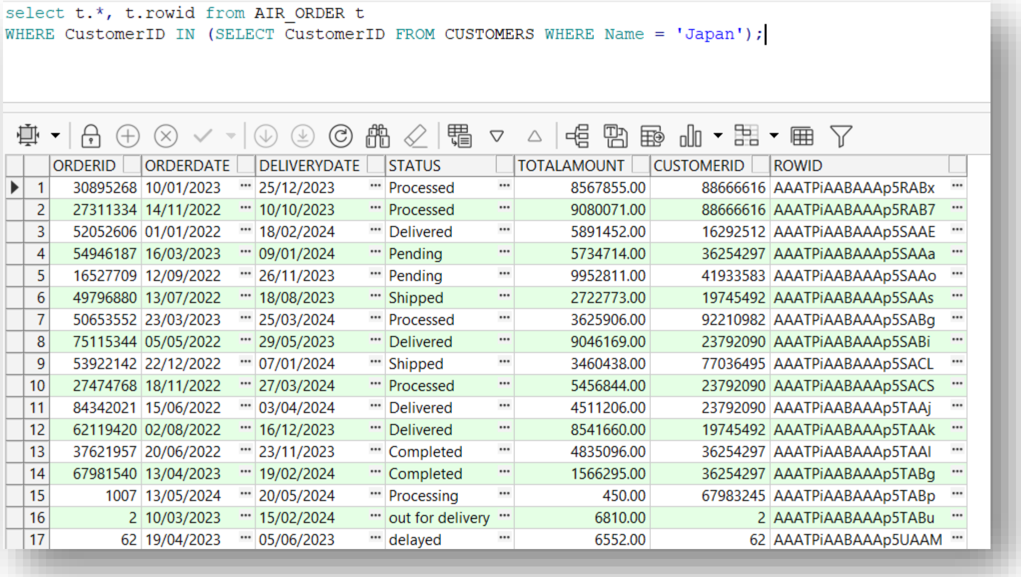
		ORDERID	ORDERDATE	DELIVERYDATE	STATUS	TOTALAMOUNT	CUSTOMERID

DELETE QUERIES: SECOND QUERY



```
----- מחיקת הזמנות של לקוח ספציפי
DELETE FROM PAYMENT
WHERE OrderID IN (SELECT OrderID FROM AIR_ORDER WHERE CustomerID IN (SELECT CustomerID FROM CUSTOMERS WHERE Name = 'Japan'));
commit;
DELETE FROM AIR_ORDER
WHERE CustomerID IN (SELECT CustomerID FROM CUSTOMERS WHERE Name = 'Japan');
commit;
```

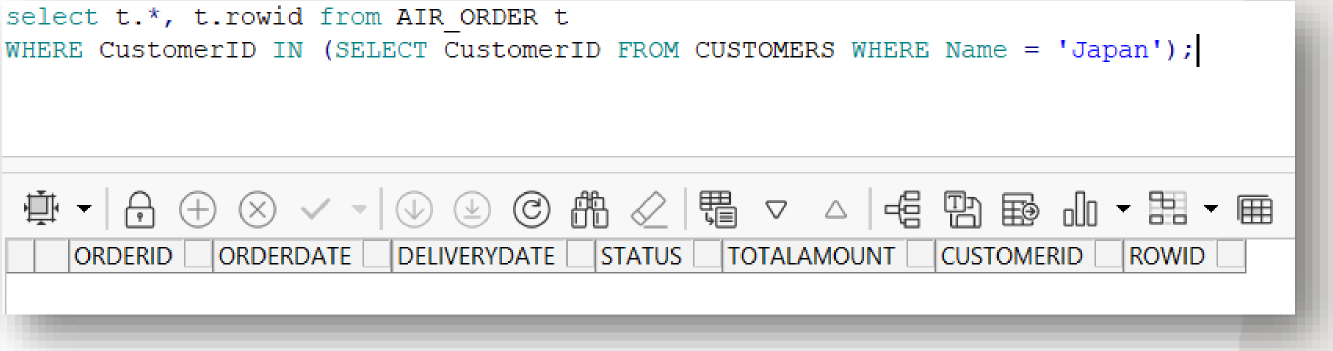
Before:



```
select t.*, t.rowid from AIR_ORDER t
WHERE CustomerID IN (SELECT CustomerID FROM CUSTOMERS WHERE Name = 'Japan');
```

	ORDERID	ORDERDATE	DELIVERYDATE	STATUS	TOTALAMOUNT	CUSTOMERID	ROWID
1	30895268	10/01/2023	25/12/2023	Processed	8567855.00	88666616	AAATPiAABAAAp5RABx
2	27311334	14/11/2022	10/10/2023	Processed	9080071.00	88666616	AAATPiAABAAAp5RAB7
3	52052606	01/01/2022	18/02/2024	Delivered	5891452.00	16292512	AAATPiAABAAAp5SAAE
4	54946187	16/03/2023	09/01/2024	Pending	5734714.00	36254297	AAATPiAABAAAp5SAAa
5	16527709	12/09/2022	26/11/2023	Pending	9952811.00	41933583	AAATPiAABAAAp5SAAo
6	49796880	13/07/2022	18/08/2023	Shipped	2722773.00	19745492	AAATPiAABAAAp5SAAs
7	50653552	23/03/2023	25/03/2024	Processed	3625906.00	92210982	AAATPiAABAAAp5SABg
8	75115344	05/05/2022	29/05/2023	Delivered	9046169.00	23792090	AAATPiAABAAAp5SABi
9	53922142	22/12/2022	07/01/2024	Shipped	3460438.00	77036495	AAATPiAABAAAp5SACL
10	27474768	18/11/2022	27/03/2024	Processed	5456844.00	23792090	AAATPiAABAAAp5SACS
11	84342021	15/06/2022	03/04/2024	Delivered	4511206.00	23792090	AAATPiAABAAAp5TAAj
12	62119420	02/08/2022	16/12/2023	Delivered	8541660.00	19745492	AAATPiAABAAAp5TAAk
13	37621957	20/06/2022	23/11/2023	Completed	4835096.00	36254297	AAATPiAABAAAp5TAAl
14	67981540	13/04/2023	19/02/2024	Completed	1566295.00	36254297	AAATPiAABAAAp5TABg
15	1007	13/05/2024	20/05/2024	Processing	450.00	67983245	AAATPiAABAAAp5TABp
16	2	10/03/2023	15/02/2024	out for delivery	6810.00	2	AAATPiAABAAAp5TABu
17	62	19/04/2023	05/06/2023	delayed	6552.00	62	AAATPiAABAAAp5UAAM

After:



```
select t.*, t.rowid from AIR_ORDER t
WHERE CustomerID IN (SELECT CustomerID FROM CUSTOMERS WHERE Name = 'Japan');
```

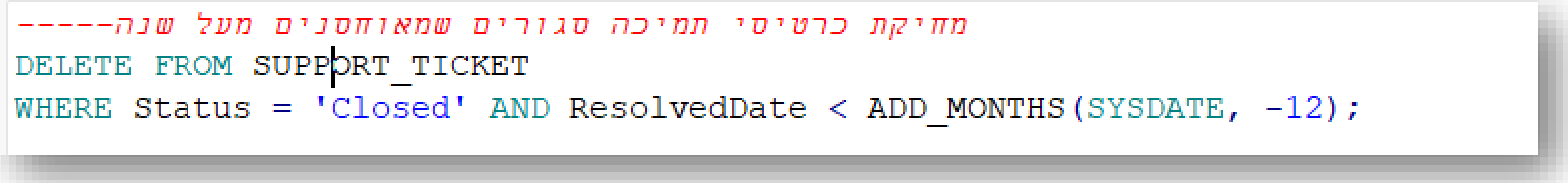
	ORDERID	ORDERDATE	DELIVERYDATE	STATUS	TOTALAMOUNT	CUSTOMERID	ROWID

second delete query:

Query deletes orders from specific customer in the relevant tables.

השאילתא מוחקת את כל ההזמנות מלקוח מסוים שנבחר.

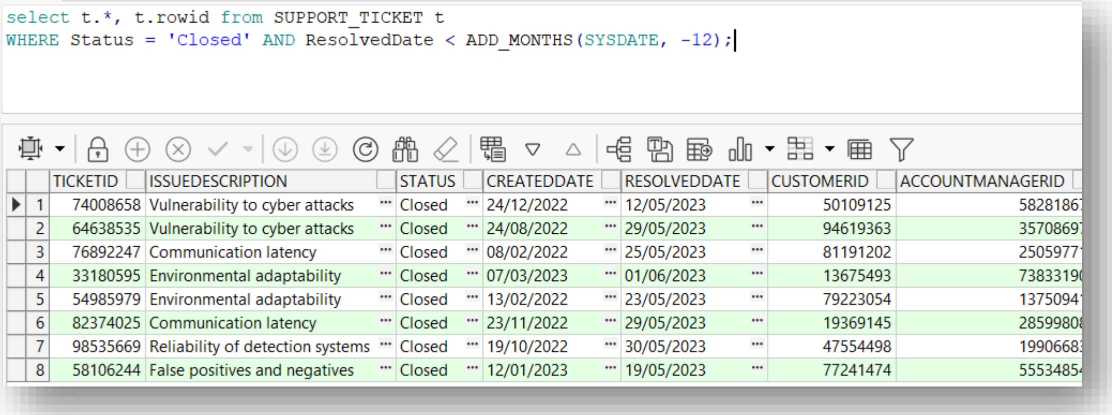
DELETE QUERIES: BONUS QUERY



```
-----מחיקת כרטיסי תמיכה סגורים שמאוחסנים מעל שנה
DELETE FROM SUPPORT_TICKET
WHERE Status = 'Closed' AND ResolvedDate < ADD_MONTHS(SYSDATE, -12);
```

השאילתא מוחקת את כל כרטיסי התמיכה שנסגרו לפני מעל לשנה.

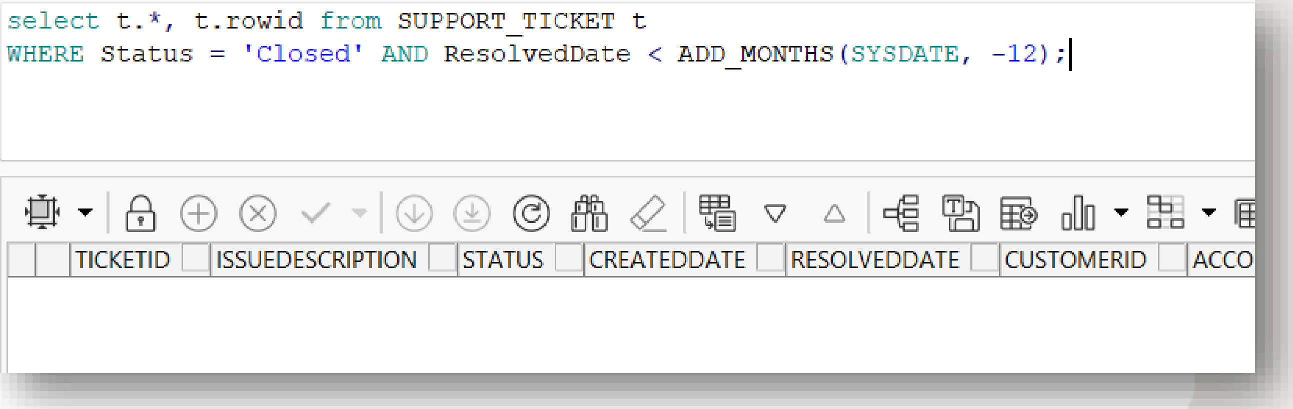
Before:



```
select t.*, t.rowid from SUPPORT_TICKET t
WHERE Status = 'Closed' AND ResolvedDate < ADD_MONTHS(SYSDATE, -12);
```

	TICKETID	ISSUEDESCRIPTION	STATUS	CREATEDDATE	RESOLVEDDATE	CUSTOMERID	ACCOUNTMANAGERID
1	74008658	Vulnerability to cyber attacks	Closed	24/12/2022	12/05/2023	50109125	5828186
2	64638535	Vulnerability to cyber attacks	Closed	24/08/2022	29/05/2023	94619363	3570869
3	76892247	Communication latency	Closed	08/02/2022	25/05/2023	81191202	2505977
4	33180595	Environmental adaptability	Closed	07/03/2023	01/06/2023	13675493	7383319
5	54985979	Environmental adaptability	Closed	13/02/2022	23/05/2023	79223054	1375094
6	82374025	Communication latency	Closed	23/11/2022	29/05/2023	19369145	2859980
7	98535669	Reliability of detection systems	Closed	19/10/2022	30/05/2023	47554498	1990668
8	58106244	False positives and negatives	Closed	12/01/2023	19/05/2023	77241474	5553485

After:



```
select t.*, t.rowid from SUPPORT_TICKET t
WHERE Status = 'Closed' AND ResolvedDate < ADD_MONTHS(SYSDATE, -12);
```

TICKETID	ISSUEDESCRIPTION	STATUS	CREATEDDATE	RESOLVEDDATE	CUSTOMERID	ACCO

bonus delete query:

Query deletes closed support tickets that are stored for more than a year.

UPDATE QUERIES: FIRST QUERY

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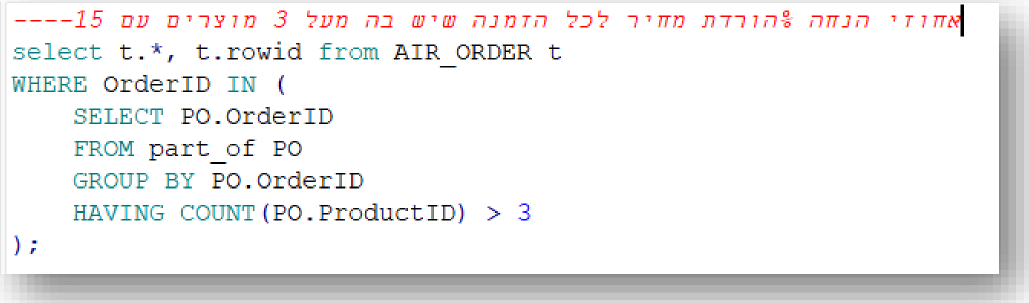
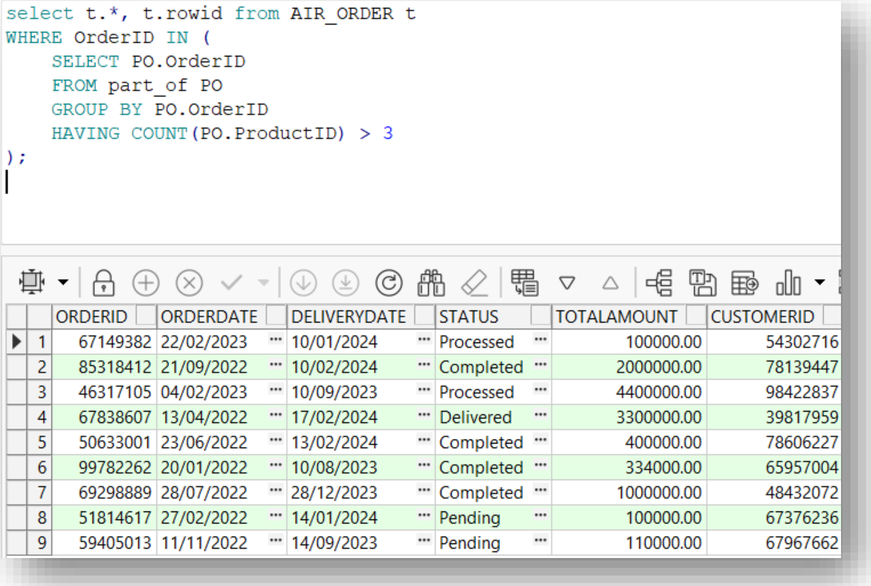
PRECISION, PROTECTION , GLOBAL SECURITY



```
----15 אחוזי הנחה %הורדת מחיר לכל הזמנה שיש בה מעל 3 מוצרים עם
select t.*, t.rowid from AIR_ORDER t
WHERE OrderID IN (
    SELECT PO.OrderID
    FROM part_of PO
    GROUP BY PO.OrderID
    HAVING COUNT(PO.ProductID) > 3
);
```

השאילתה מעדכנת את המחיר
ונותנת הנחה של 15% לכל הזמנה
שיש בה מעל 3 מוצרים

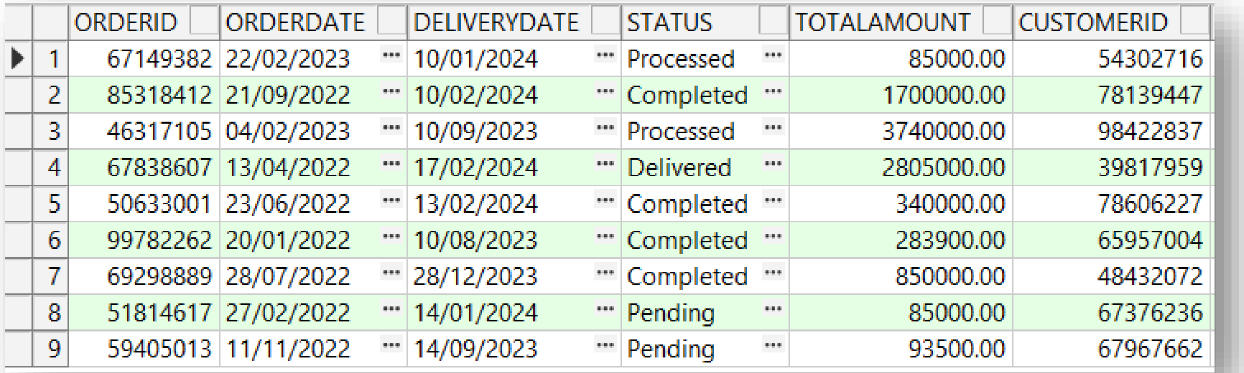
Before:



```
select t.*, t.rowid from AIR_ORDER t
WHERE OrderID IN (
    SELECT PO.OrderID
    FROM part_of PO
    GROUP BY PO.OrderID
    HAVING COUNT(PO.ProductID) > 3
);
```

	ORDERID	ORDERDATE	DELIVERYDATE	STATUS	TOTALAMOUNT	CUSTOMERID
1	67149382	22/02/2023	10/01/2024	Processed	100000.00	54302716
2	85318412	21/09/2022	10/02/2024	Completed	2000000.00	78139447
3	46317105	04/02/2023	10/09/2023	Processed	4400000.00	98422837
4	67838607	13/04/2022	17/02/2024	Delivered	3300000.00	39817959
5	50633001	23/06/2022	13/02/2024	Completed	400000.00	78606227
6	99782262	20/01/2022	10/08/2023	Completed	334000.00	65957004
7	69298889	28/07/2022	28/12/2023	Completed	1000000.00	48432072
8	51814617	27/02/2022	14/01/2024	Pending	100000.00	67376236
9	59405013	11/11/2022	14/09/2023	Pending	110000.00	67967662

After:

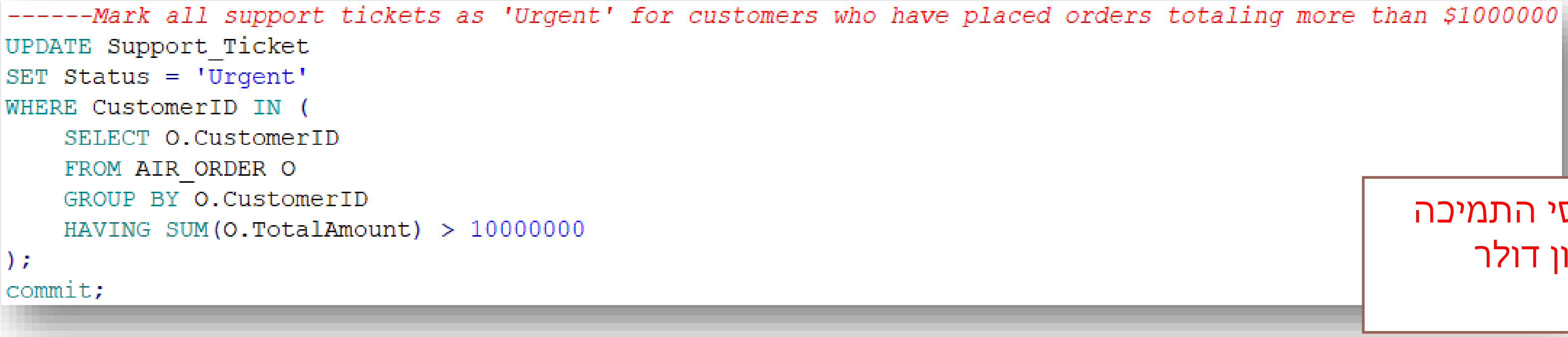


	ORDERID	ORDERDATE	DELIVERYDATE	STATUS	TOTALAMOUNT	CUSTOMERID
1	67149382	22/02/2023	10/01/2024	Processed	85000.00	54302716
2	85318412	21/09/2022	10/02/2024	Completed	1700000.00	78139447
3	46317105	04/02/2023	10/09/2023	Processed	3740000.00	98422837
4	67838607	13/04/2022	17/02/2024	Delivered	2805000.00	39817959
5	50633001	23/06/2022	13/02/2024	Completed	340000.00	78606227
6	99782262	20/01/2022	10/08/2023	Completed	283900.00	65957004
7	69298889	28/07/2022	28/12/2023	Completed	850000.00	48432072
8	51814617	27/02/2022	14/01/2024	Pending	85000.00	67376236
9	59405013	11/11/2022	14/09/2023	Pending	93500.00	67967662

Update query:

Query decreases the total amount of any order containing more than 3 products by 15%

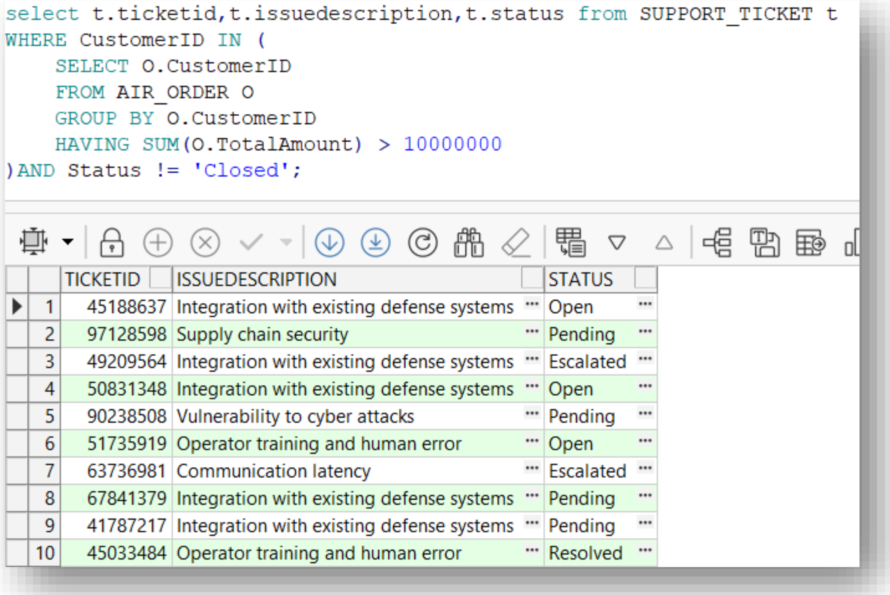
UPDATE QUERIES: SECOND QUERY



```
------Mark all support tickets as 'Urgent' for customers who have placed orders totaling more than $1000000
UPDATE Support_Ticket
SET Status = 'Urgent'
WHERE CustomerID IN (
    SELECT O.CustomerID
    FROM AIR_ORDER O
    GROUP BY O.CustomerID
    HAVING SUM(O.TotalAmount) > 10000000
);
commit;
```

השאילתה מעדכנת את כל כרטיסי התמיכה
של לקוחות שהזמינו במעל למיליון דולר
במצטבר, לסטטוס **'דחוף'**

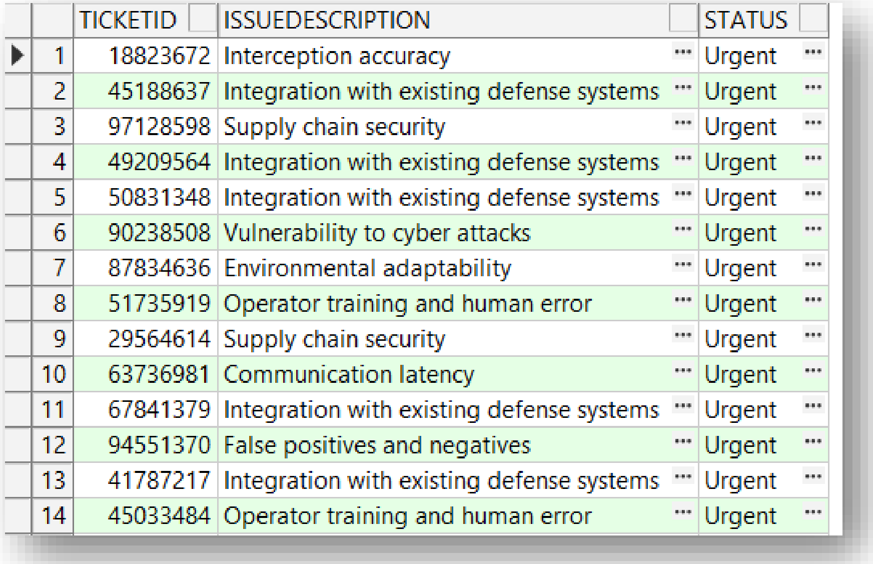
Before:



```
select t.ticketid,t.issuedescription,t.status from SUPPORT_TICKET t
WHERE CustomerID IN (
    SELECT O.CustomerID
    FROM AIR_ORDER O
    GROUP BY O.CustomerID
    HAVING SUM(O.TotalAmount) > 10000000
)AND Status != 'Closed';
```

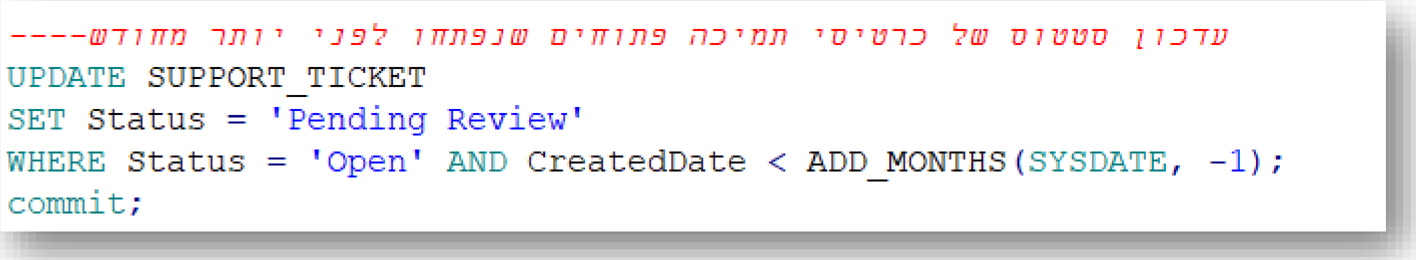
	TICKETID	ISSUEDESCRIPTION	STATUS
1	45188637	Integration with existing defense systems	Open
2	97128598	Supply chain security	Pending
3	49209564	Integration with existing defense systems	Escalated
4	50831348	Integration with existing defense systems	Open
5	90238508	Vulnerability to cyber attacks	Pending
6	51735919	Operator training and human error	Open
7	63736981	Communication latency	Escalated
8	67841379	Integration with existing defense systems	Pending
9	41787217	Integration with existing defense systems	Pending
10	45033484	Operator training and human error	Resolved

After:



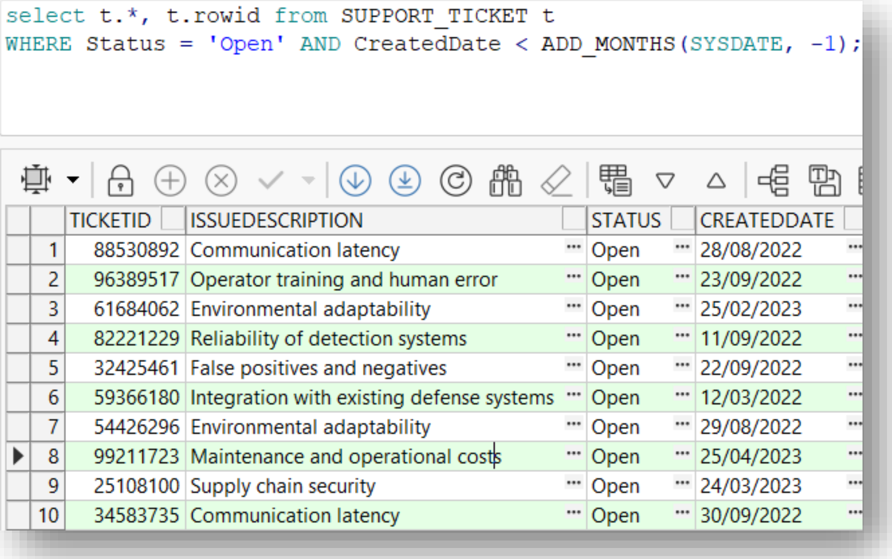
	TICKETID	ISSUEDESCRIPTION	STATUS
1	18823672	Interception accuracy	Urgent
2	45188637	Integration with existing defense systems	Urgent
3	97128598	Supply chain security	Urgent
4	49209564	Integration with existing defense systems	Urgent
5	50831348	Integration with existing defense systems	Urgent
6	90238508	Vulnerability to cyber attacks	Urgent
7	87834636	Environmental adaptability	Urgent
8	51735919	Operator training and human error	Urgent
9	29564614	Supply chain security	Urgent
10	63736981	Communication latency	Urgent
11	67841379	Integration with existing defense systems	Urgent
12	94551370	False positives and negatives	Urgent
13	41787217	Integration with existing defense systems	Urgent
14	45033484	Operator training and human error	Urgent

UPDATE QUERIES: BONUS QUERY



```
----עדכון סטטוס של כרטיסי תמיכה פתוחים שנפתחו לפני יותר מחודש
UPDATE SUPPORT_TICKET
SET Status = 'Pending Review'
WHERE Status = 'Open' AND CreatedDate < ADD_MONTHS(SYSDATE, -1);
commit;
```

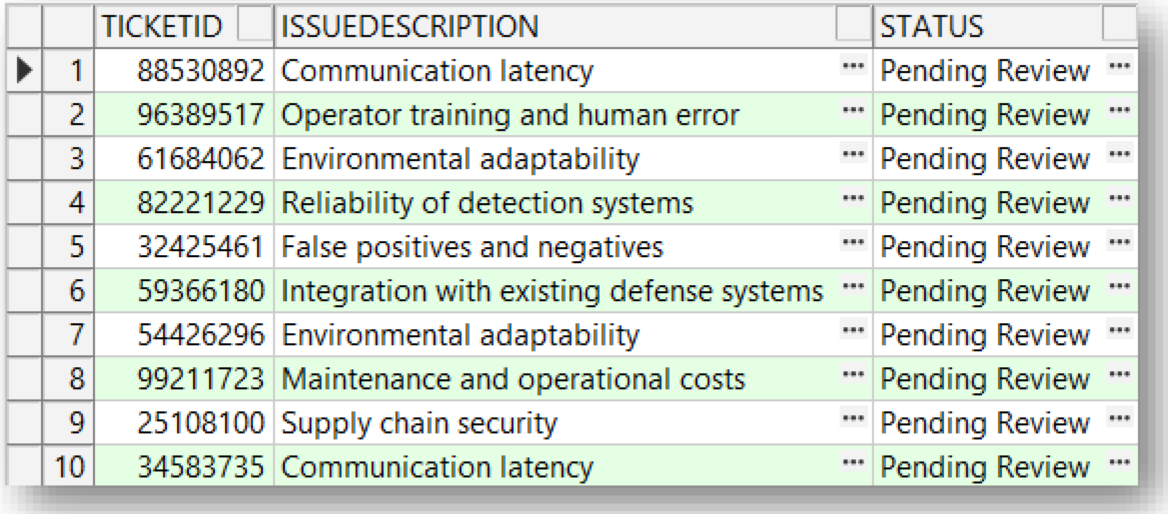
Before:



```
select t.*, t.rowid from SUPPORT_TICKET t
WHERE Status = 'Open' AND CreatedDate < ADD_MONTHS(SYSDATE, -1);
```

	TICKETID	ISSUEDESCRIPTION	STATUS	CREATEDDATE
1	88530892	Communication latency	Open	28/08/2022
2	96389517	Operator training and human error	Open	23/09/2022
3	61684062	Environmental adaptability	Open	25/02/2023
4	82221229	Reliability of detection systems	Open	11/09/2022
5	32425461	False positives and negatives	Open	22/09/2022
6	59366180	Integration with existing defense systems	Open	12/03/2022
7	54426296	Environmental adaptability	Open	29/08/2022
8	99211723	Maintenance and operational costs	Open	25/04/2023
9	25108100	Supply chain security	Open	24/03/2023
10	34583735	Communication latency	Open	30/09/2022

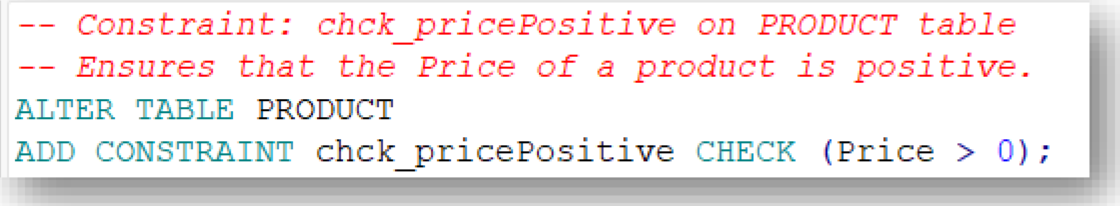
After:



	TICKETID	ISSUEDESCRIPTION	STATUS
1	88530892	Communication latency	Pending Review
2	96389517	Operator training and human error	Pending Review
3	61684062	Environmental adaptability	Pending Review
4	82221229	Reliability of detection systems	Pending Review
5	32425461	False positives and negatives	Pending Review
6	59366180	Integration with existing defense systems	Pending Review
7	54426296	Environmental adaptability	Pending Review
8	99211723	Maintenance and operational costs	Pending Review
9	25108100	Supply chain security	Pending Review
10	34583735	Communication latency	Pending Review

CONSTRAINTS: PRODUCT PRICE SHOULD BE POSITIVE

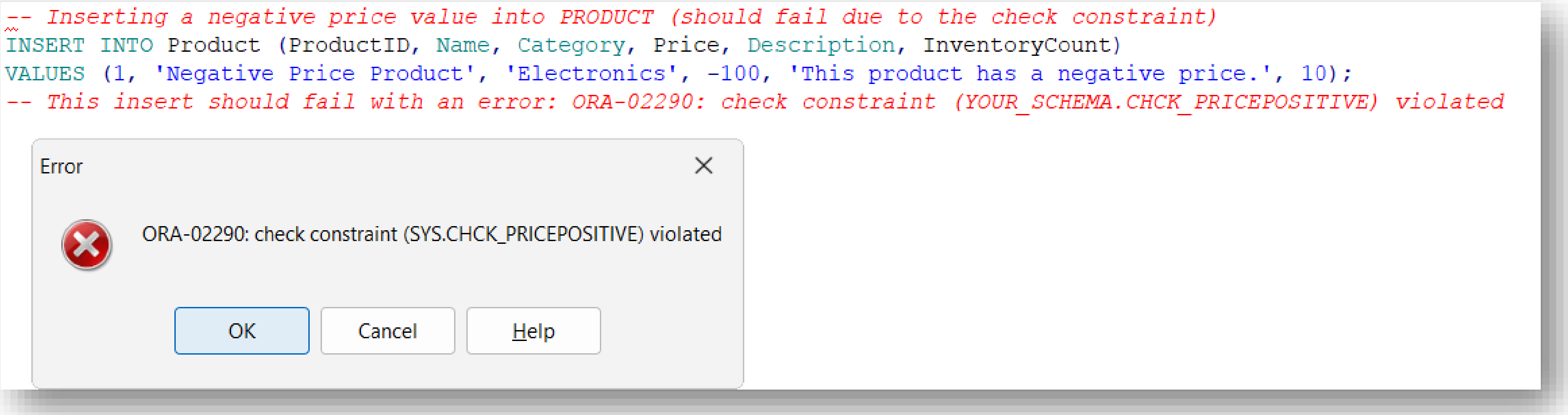
LEV & MISSILES
PRECISION, PROTECTION , GLOBAL SECURITY



```
-- Constraint: chck_pricePositive on PRODUCT table
-- Ensures that the Price of a product is positive.
ALTER TABLE PRODUCT
ADD CONSTRAINT chck_pricePositive CHECK (Price > 0);
```

האילוץ מוודא שמחיר של מוצר הוא
חיובי, ומונע הכנסת ערך שלילי
למחירו של מוצר.

example:

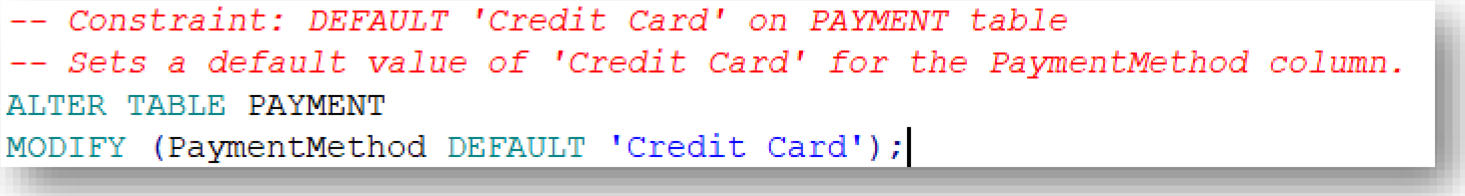


```
-- Inserting a negative price value into PRODUCT (should fail due to the check constraint)
INSERT INTO Product (ProductID, Name, Category, Price, Description, InventoryCount)
VALUES (1, 'Negative Price Product', 'Electronics', -100, 'This product has a negative price.', 10);
-- This insert should fail with an error: ORA-02290: check constraint (YOUR_SCHEMA.CHCK_PRICEPOSITIVE) violated
```

Error

ORA-02290: check constraint (SYS.CHCK_PRICEPOSITIVE) violated

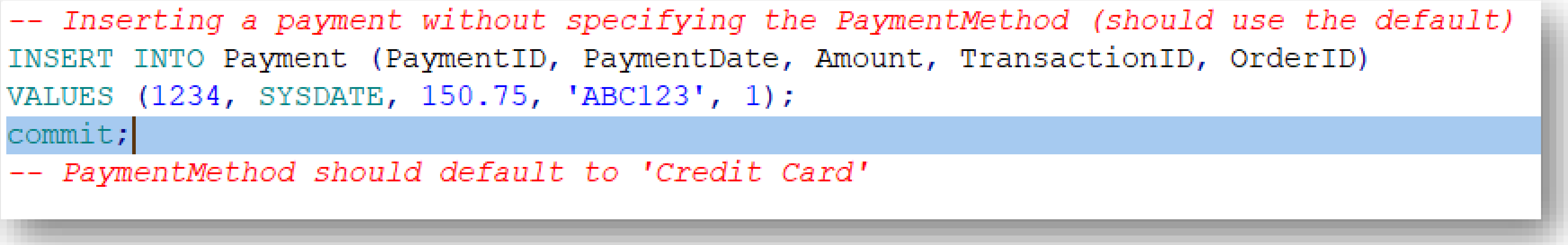
CONSTRAINTS: DEFAULT PAYMENT METHOD



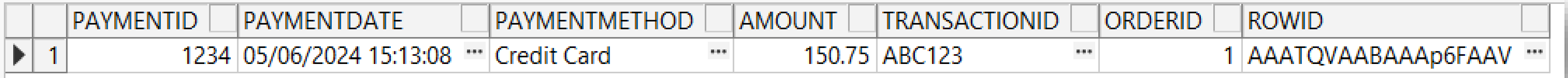
```
-- Constraint: DEFAULT 'Credit Card' on PAYMENT table
-- Sets a default value of 'Credit Card' for the PaymentMethod column.
ALTER TABLE PAYMENT
MODIFY (PaymentMethod DEFAULT 'Credit Card');
```

האילוץ מספק ערך ברירת מחדל
לבחירת סוג התשלום – **כרטיס אשראי**

example:

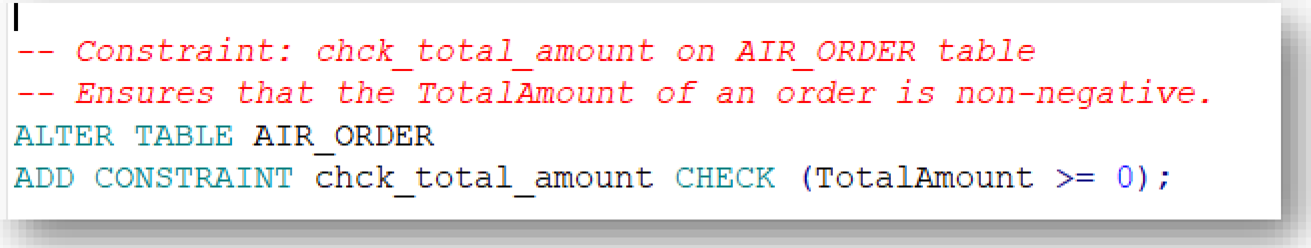


```
-- Inserting a payment without specifying the PaymentMethod (should use the default)
INSERT INTO Payment (PaymentID, PaymentDate, Amount, TransactionID, OrderID)
VALUES (1234, SYSDATE, 150.75, 'ABC123', 1);
commit;
-- PaymentMethod should default to 'Credit Card'
```



	PAYMENTID	PAYMENTDATE	PAYMENTMETHOD	AMOUNT	TRANSACTIONID	ORDERID	ROWID
1	1234	05/06/2024 15:13:08	Credit Card	150.75	ABC123	1	AAATQVAABAAAp6FAAV

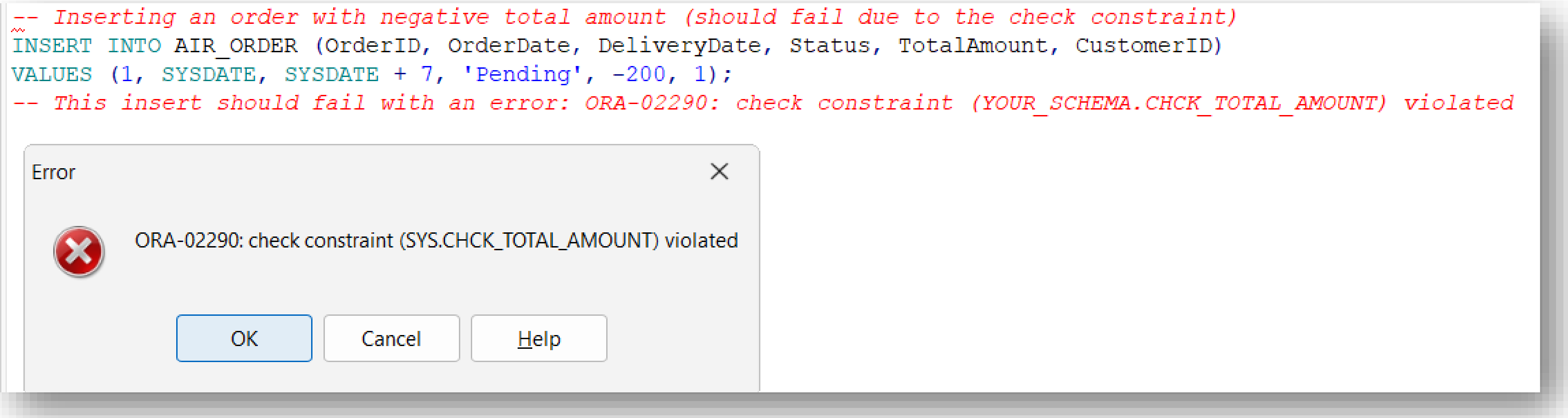
CONSTRAINTS: TOTAL AMOUNT IS NOT NEGETIVE



```
-- Constraint: chck_total_amount on AIR_ORDER table
-- Ensures that the TotalAmount of an order is non-negative.
ALTER TABLE AIR_ORDER
ADD CONSTRAINT chck_total_amount CHECK (TotalAmount >= 0);
```

האילוץ מוודא שהסכום הכולל של
ההזמנות גדול או שווה ל0

example:



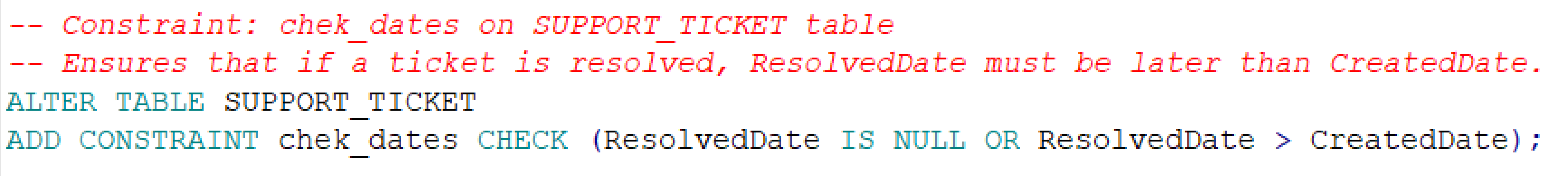
```
-- Inserting an order with negative total amount (should fail due to the check constraint)
INSERT INTO AIR_ORDER (OrderID, OrderDate, DeliveryDate, Status, TotalAmount, CustomerID)
VALUES (1, SYSDATE, SYSDATE + 7, 'Pending', -200, 1);
-- This insert should fail with an error: ORA-02290: check constraint (YOUR_SCHEMA.CHCK_TOTAL_AMOUNT) violated
```

Error

ORA-02290: check constraint (SYS.CHCK_TOTAL_AMOUNT) violated

CONSTRAINTS-

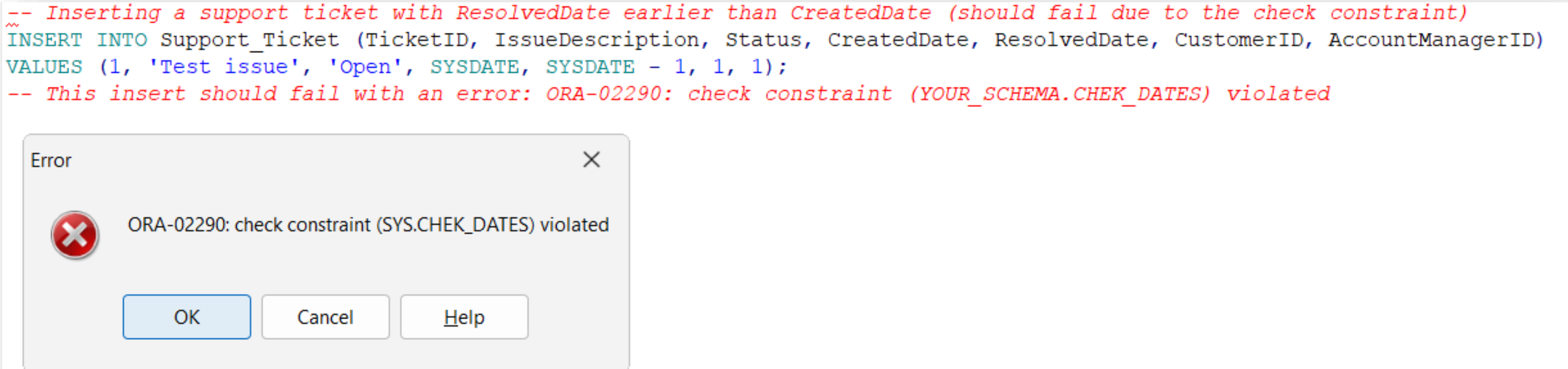
ENSURES THAT IF A TICKET IS RESOLVED, RESOLVEDDATE MUST BE LATER THAN CREATEDDATE.



```
-- Constraint: chek_dates on SUPPORT_TICKET table
-- Ensures that if a ticket is resolved, ResolvedDate must be later than CreatedDate.
ALTER TABLE SUPPORT_TICKET
ADD CONSTRAINT chek_dates CHECK (ResolvedDate IS NULL OR ResolvedDate > CreatedDate);
```

האילוץ בודק שתאריך סיום של
כרטיס תמיכה מאוחר מפתיחת
הכרטיס , או עדיין לא קיים.

example:



```
-- Inserting a support ticket with ResolvedDate earlier than CreatedDate (should fail due to the check constraint)
INSERT INTO Support_Ticket (TicketID, IssueDescription, Status, CreatedDate, ResolvedDate, CustomerID, AccountManagerID)
VALUES (1, 'Test issue', 'Open', SYSDATE, SYSDATE - 1, 1, 1);
-- This insert should fail with an error: ORA-02290: check constraint (YOUR_SCHEMA.CHEK_DATES) violated
```

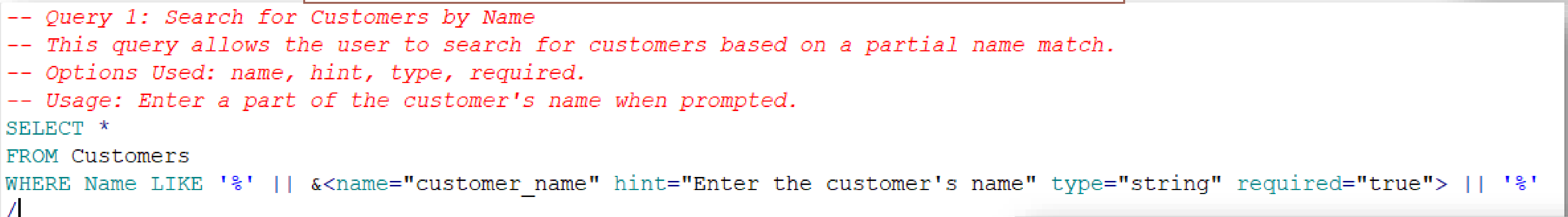
Error

ORA-02290: check constraint (SYS.CHEK_DATES) violated

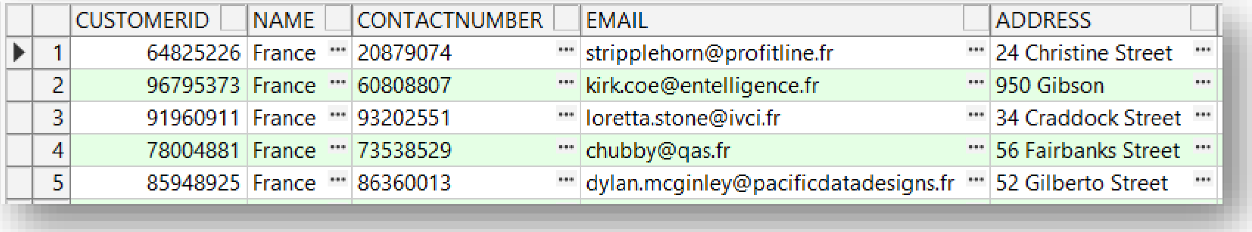
SUBSTITUTION VARIABLES QUERIES

LEV & MISSILES
PRECISION, PROTECTION , GLOBAL SECURITY

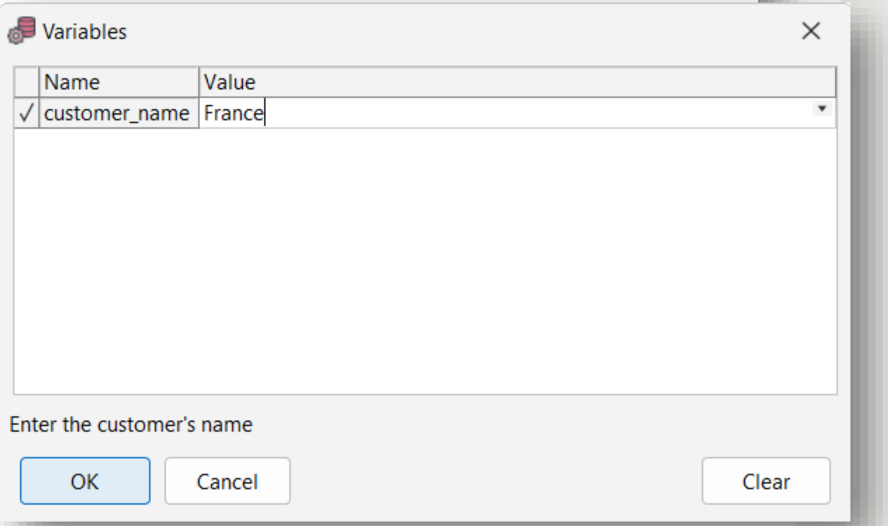
שאילתת חיפוש לקוחות לפי שם עם אפשרות לסינון לפי חלק מהשם.



```
-- Query 1: Search for Customers by Name
-- This query allows the user to search for customers based on a partial name match.
-- Options Used: name, hint, type, required.
-- Usage: Enter a part of the customer's name when prompted.
SELECT *
FROM Customers
WHERE Name LIKE '%' || &<name="customer_name" hint="Enter the customer's name" type="string" required="true"> || '%'
/
```



	CUSTOMERID	NAME	CONTACTNUMBER	EMAIL	ADDRESS
▶ 1	64825226	France	20879074	stripplehorn@profitline.fr	24 Christine Street
2	96795373	France	60808807	kirk.coe@entelligence.fr	950 Gibson
3	91960911	France	93202551	loretta.stone@ivci.fr	34 Craddock Street
4	78004881	France	73538529	chubby@qas.fr	56 Fairbanks Street
5	85948925	France	86360013	dylan.mcginley@pacificdatadesigns.fr	52 Gilberto Street

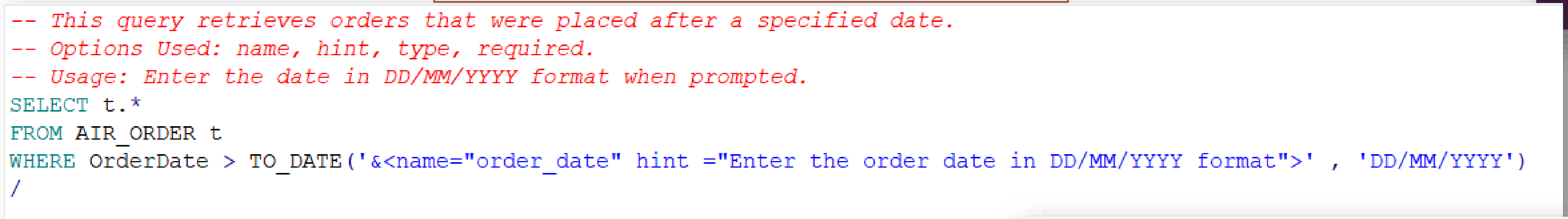


	Name	Value
✓	customer_name	France

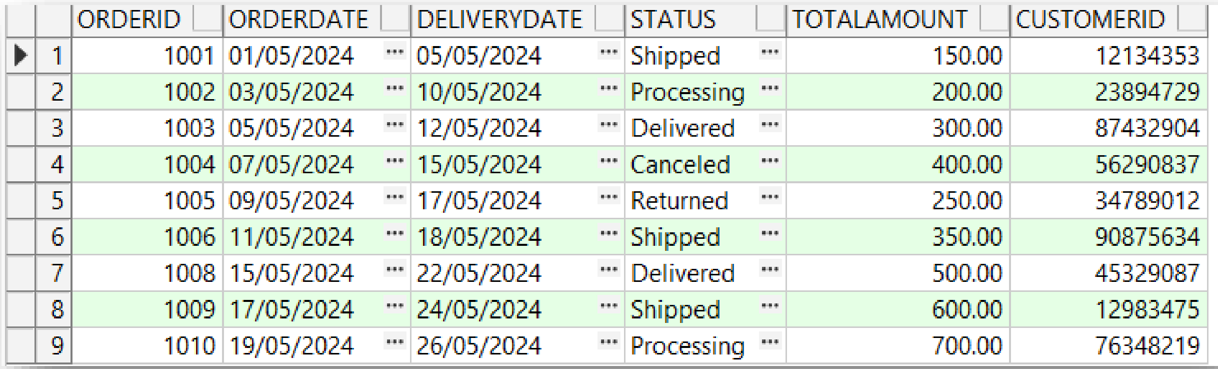
Enter the customer's name

SUBSTITUTION VARIABLES QUERIES

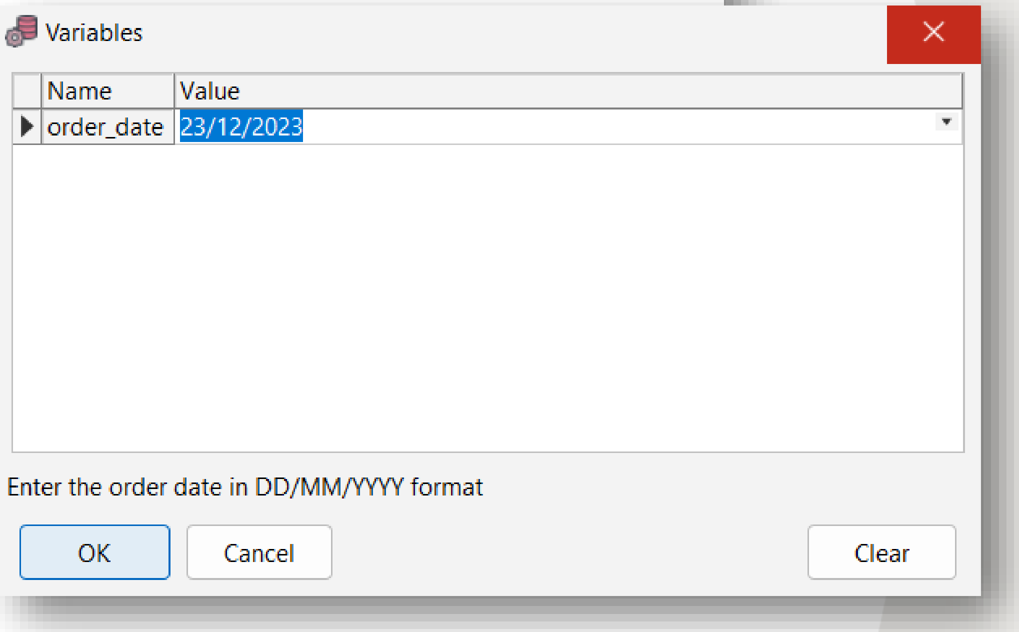
שאילתת איתור הזמנות שהוזמנו אחרי תאריך מסוים.



```
-- This query retrieves orders that were placed after a specified date.
-- Options Used: name, hint, type, required.
-- Usage: Enter the date in DD/MM/YYYY format when prompted.
SELECT t.*
FROM AIR_ORDER t
WHERE OrderDate > TO_DATE('&<name="order_date" hint ="Enter the order date in DD/MM/YYYY format">' , 'DD/MM/YYYY')
/
```



	ORDERID	ORDERDATE	DELIVERYDATE	STATUS	TOTALAMOUNT	CUSTOMERID
1	1001	01/05/2024	05/05/2024	Shipped	150.00	12134353
2	1002	03/05/2024	10/05/2024	Processing	200.00	23894729
3	1003	05/05/2024	12/05/2024	Delivered	300.00	87432904
4	1004	07/05/2024	15/05/2024	Canceled	400.00	56290837
5	1005	09/05/2024	17/05/2024	Returned	250.00	34789012
6	1006	11/05/2024	18/05/2024	Shipped	350.00	90875634
7	1008	15/05/2024	22/05/2024	Delivered	500.00	45329087
8	1009	17/05/2024	24/05/2024	Shipped	600.00	12983475
9	1010	19/05/2024	26/05/2024	Processing	700.00	76348219

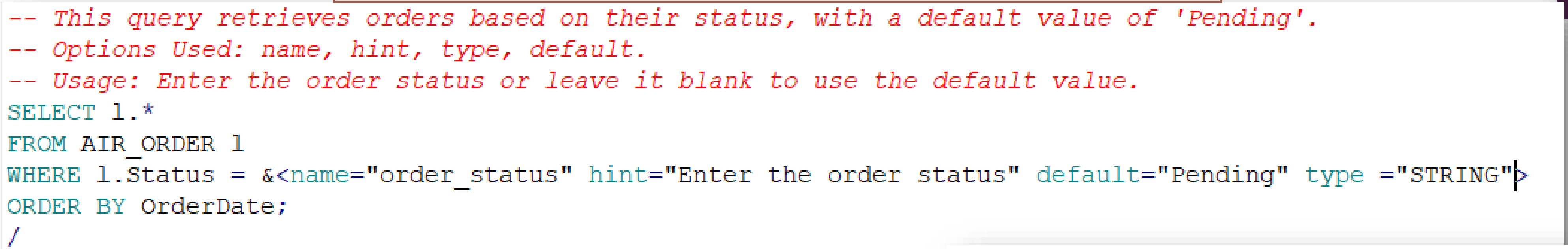


Name	Value
order_date	23/12/2023

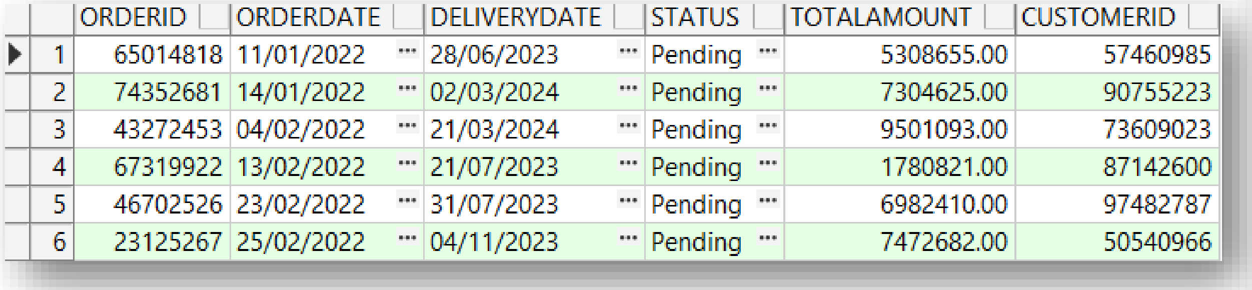
Enter the order date in DD/MM/YYYY format

SUBSTITUTION VARIABLES QUERIES

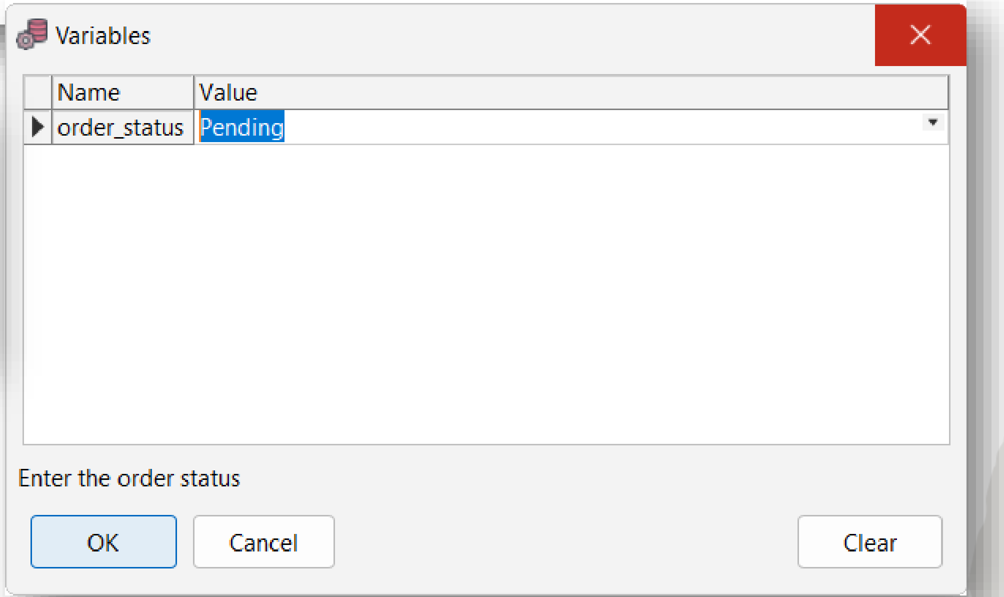
שאילתת סינון הזמנות לפי סטטוס עם אפשרות לערך ברירת מחדל.



```
-- This query retrieves orders based on their status, with a default value of 'Pending'.
-- Options Used: name, hint, type, default.
-- Usage: Enter the order status or leave it blank to use the default value.
SELECT l.*
FROM AIR_ORDER l
WHERE l.Status = &<name="order_status" hint="Enter the order status" default="Pending" type ="STRING">
ORDER BY OrderDate;
/
```



	ORDERID	ORDERDATE	DELIVERYDATE	STATUS	TOTALAMOUNT	CUSTOMERID
1	65014818	11/01/2022	28/06/2023	Pending	5308655.00	57460985
2	74352681	14/01/2022	02/03/2024	Pending	7304625.00	90755223
3	43272453	04/02/2022	21/03/2024	Pending	9501093.00	73609023
4	67319922	13/02/2022	21/07/2023	Pending	1780821.00	87142600
5	46702526	23/02/2022	31/07/2023	Pending	6982410.00	97482787
6	23125267	25/02/2022	04/11/2023	Pending	7472682.00	50540966

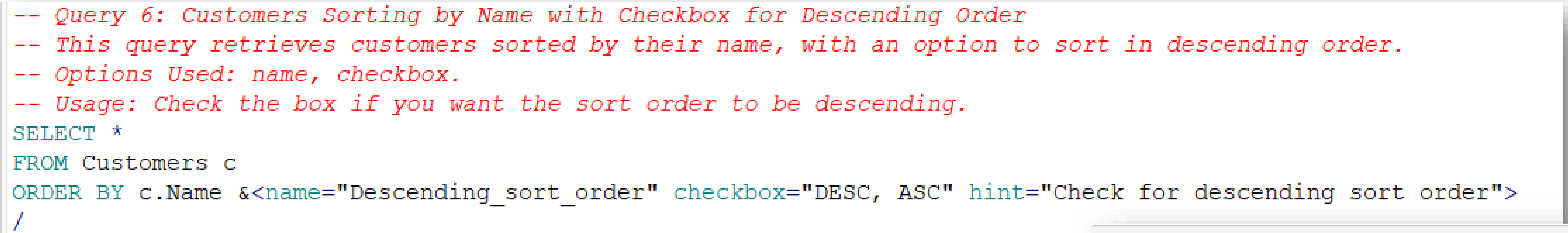


Name	Value
order_status	Pending

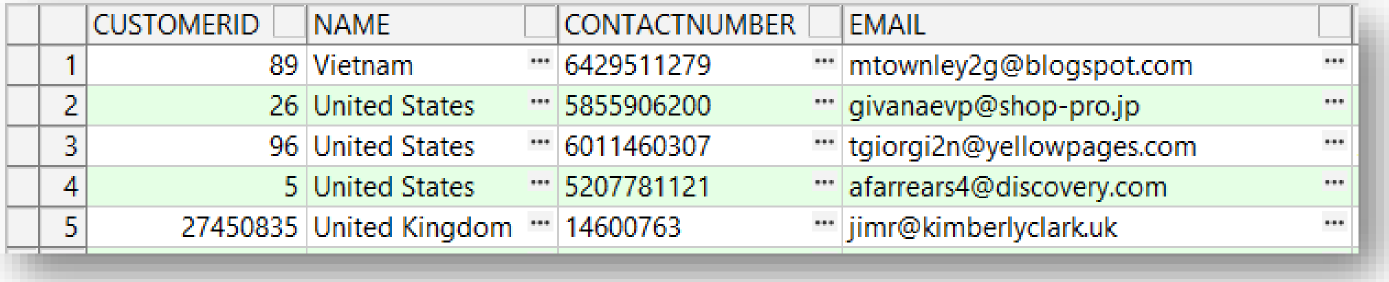
Enter the order status

SUBSTITUTION VARIABLES QUERIES

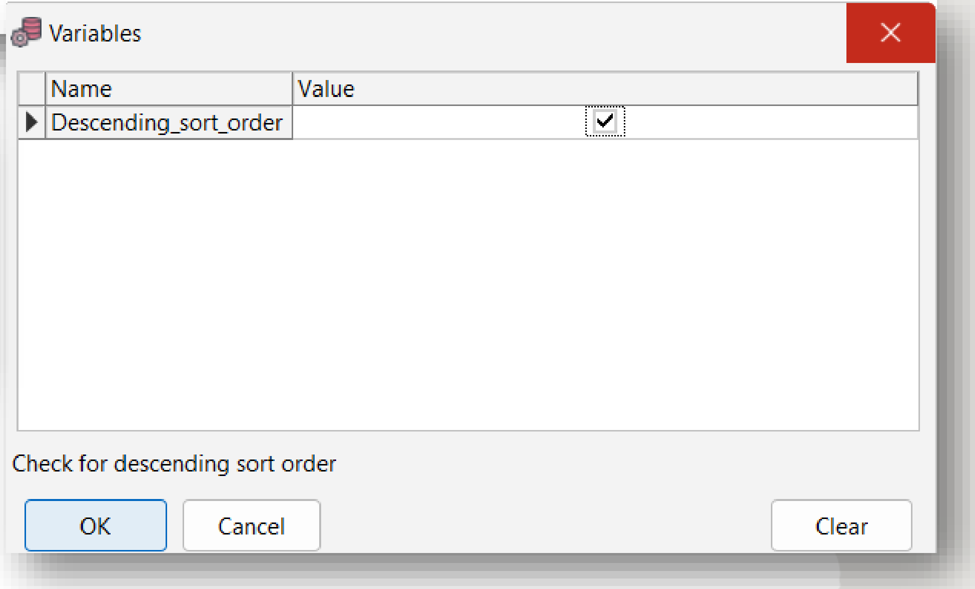
שאילתת מיון לקוחות לפי שם עם אפשרות לסידור יורד.



```
-- Query 6: Customers Sorting by Name with Checkbox for Descending Order
-- This query retrieves customers sorted by their name, with an option to sort in descending order.
-- Options Used: name, checkbox.
-- Usage: Check the box if you want the sort order to be descending.
SELECT *
FROM Customers c
ORDER BY c.Name &<name="Descending_sort_order" checkbox="DESC, ASC" hint="Check for descending sort order">
/
```



	CUSTOMERID	NAME	CONTACTNUMBER	EMAIL
1	89	Vietnam	6429511279	mtownley2g@blogspot.com
2	26	United States	5855906200	givanaevp@shop-pro.jp
3	96	United States	6011460307	tgiorgi2n@yellowpages.com
4	5	United States	5207781121	afarrears4@discovery.com
5	27450835	United Kingdom	14600763	jimr@kimberlyclark.uk

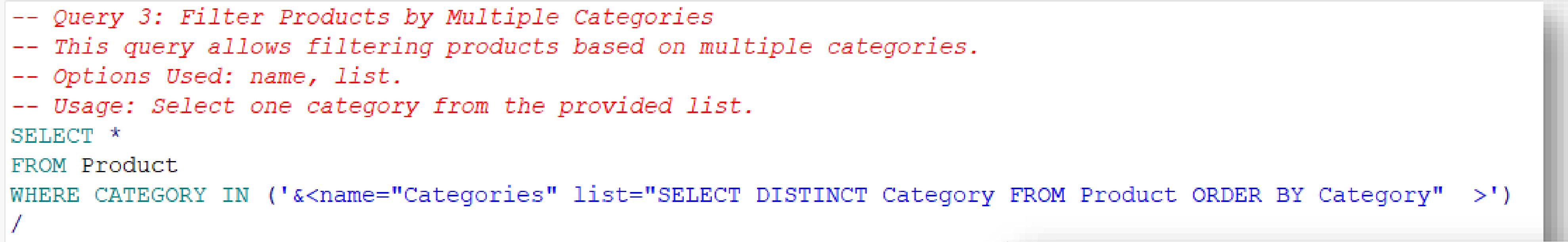


Name	Value
Descending_sort_order	☑

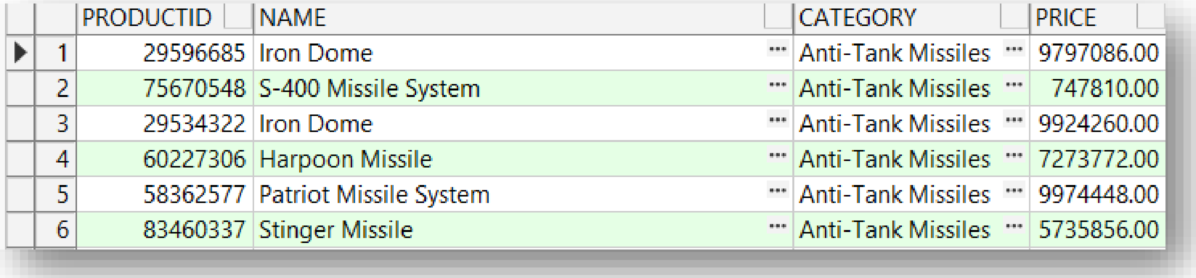
Check for descending sort order

SUBSTITUTION VARIABLES QUERIES

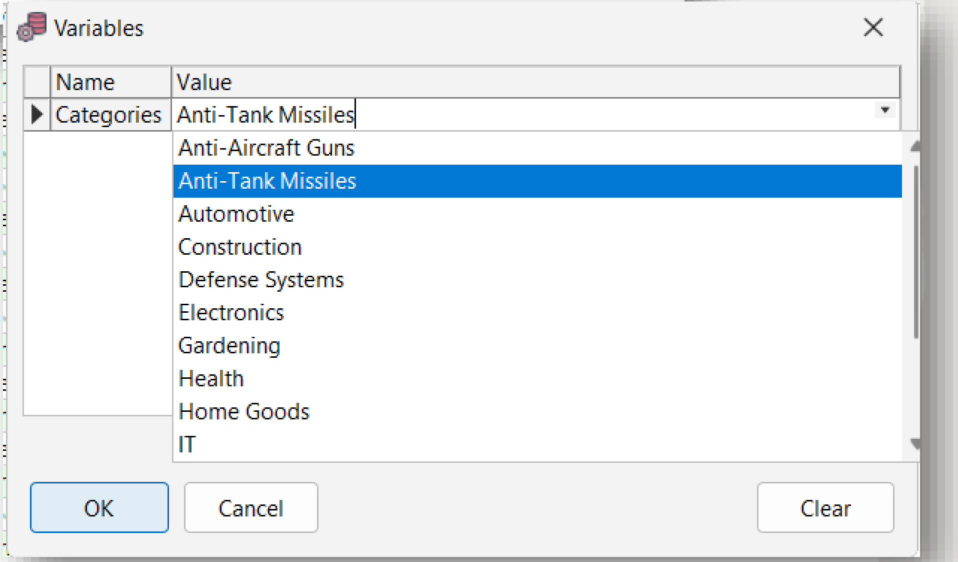
שאילתת סינון מוצרים לפי קטגוריות מרובות עם בחירה מרשימה.



```
-- Query 3: Filter Products by Multiple Categories
-- This query allows filtering products based on multiple categories.
-- Options Used: name, list.
-- Usage: Select one category from the provided list.
SELECT *
FROM Product
WHERE CATEGORY IN ('&<name="Categories" list="SELECT DISTINCT Category FROM Product ORDER BY Category"  >')
/
```



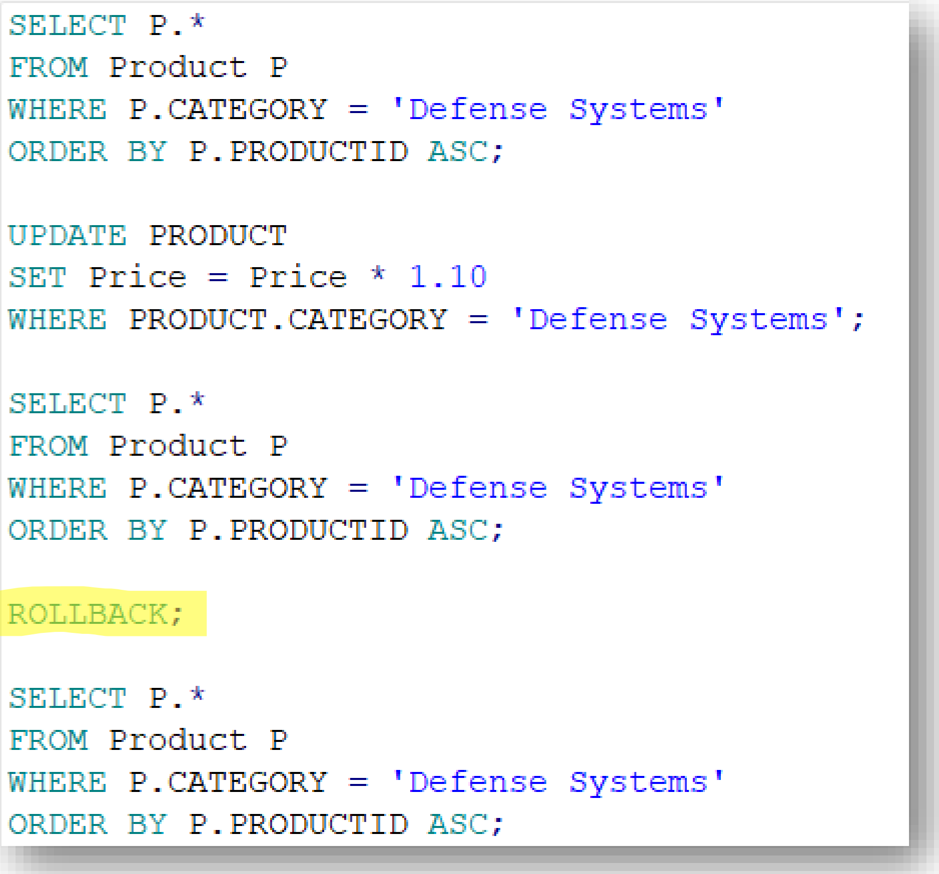
	PRODUCTID	NAME	CATEGORY	PRICE
1	29596685	Iron Dome	Anti-Tank Missiles	9797086.00
2	75670548	S-400 Missile System	Anti-Tank Missiles	747810.00
3	29534322	Iron Dome	Anti-Tank Missiles	9924260.00
4	60227306	Harpoon Missile	Anti-Tank Missiles	7273772.00
5	58362577	Patriot Missile System	Anti-Tank Missiles	9974448.00
6	83460337	Stinger Missile	Anti-Tank Missiles	5735856.00



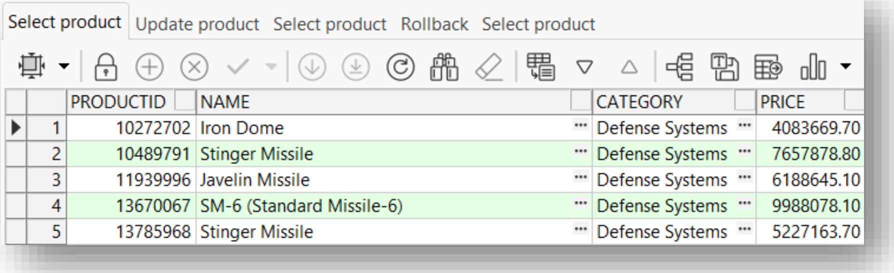
Variables

Name	Value
Categories	Anti-Tank Missiles

ROLLBACK & COMMIT : ROLLBACK

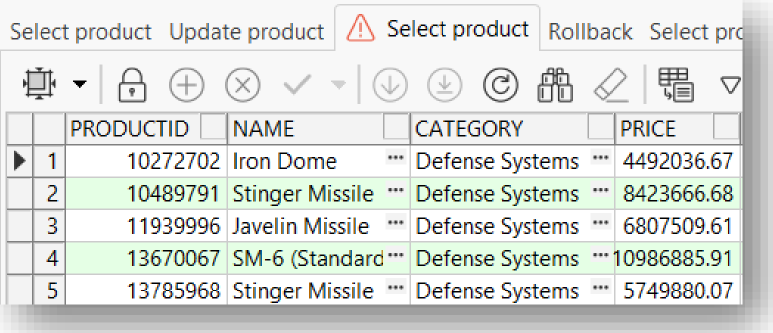


```
SELECT P.*
FROM Product P
WHERE P.CATEGORY = 'Defense Systems'
ORDER BY P.PRODUCTID ASC;

UPDATE PRODUCT
SET Price = Price * 1.10
WHERE PRODUCT.CATEGORY = 'Defense Systems';

SELECT P.*
FROM Product P
WHERE P.CATEGORY = 'Defense Systems'
ORDER BY P.PRODUCTID ASC;

ROLLBACK;

SELECT P.*
FROM Product P
WHERE P.CATEGORY = 'Defense Systems'
ORDER BY P.PRODUCTID ASC;
```



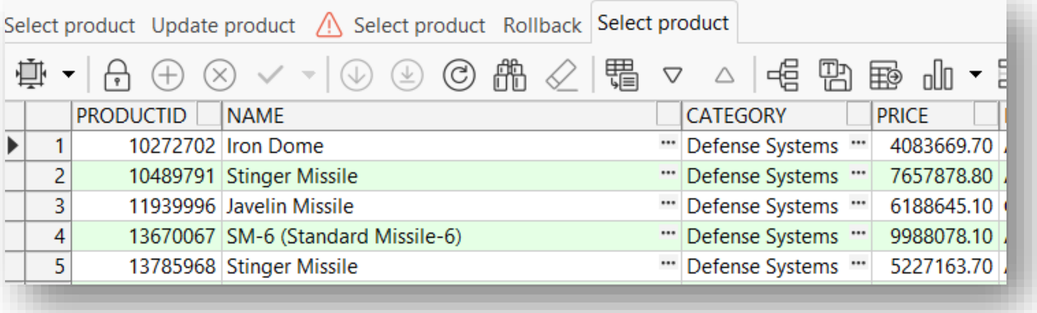
	PRODUCTID	NAME	CATEGORY	PRICE
1	10272702	Iron Dome	Defense Systems	4083669.70
2	10489791	Stinger Missile	Defense Systems	7657878.80
3	11939996	Javelin Missile	Defense Systems	6188645.10
4	13670067	SM-6 (Standard Missile-6)	Defense Systems	9988078.10
5	13785968	Stinger Missile	Defense Systems	5227163.70

FIRST SELECT



	PRODUCTID	NAME	CATEGORY	PRICE
1	10272702	Iron Dome	Defense Systems	4492036.67
2	10489791	Stinger Missile	Defense Systems	8423666.68
3	11939996	Javelin Missile	Defense Systems	6807509.61
4	13670067	SM-6 (Standard	Defense Systems	10986885.91
5	13785968	Stinger Missile	Defense Systems	5749880.07

UPDATED SELECT
PRICE*1.10

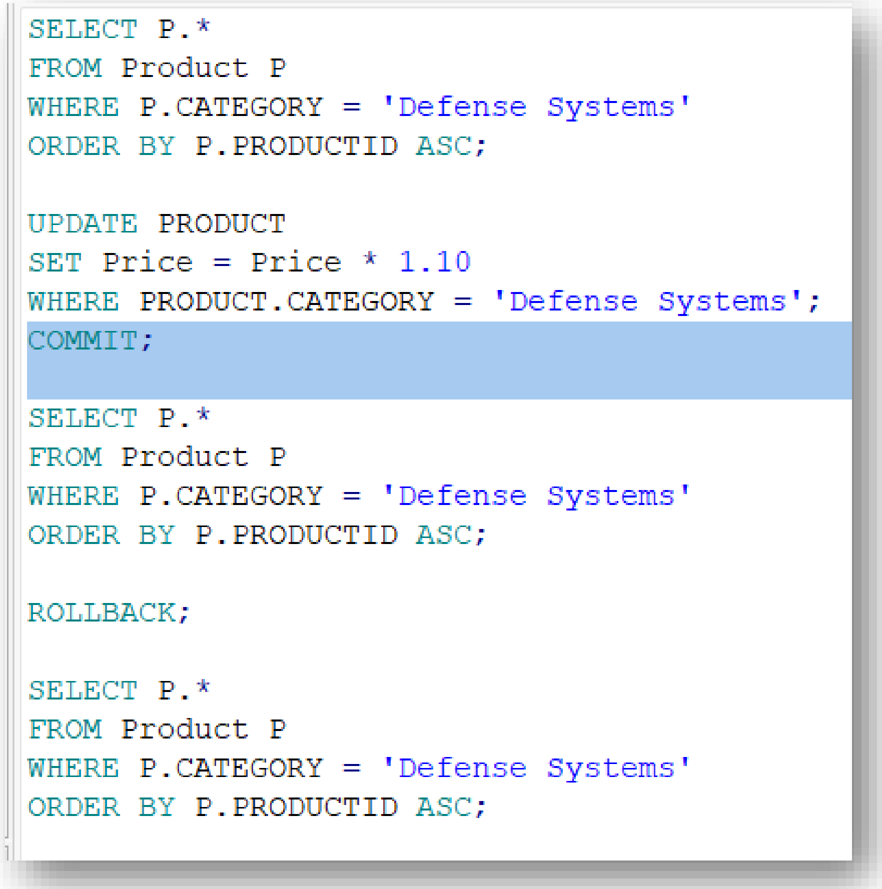


	PRODUCTID	NAME	CATEGORY	PRICE
1	10272702	Iron Dome	Defense Systems	4083669.70
2	10489791	Stinger Missile	Defense Systems	7657878.80
3	11939996	Javelin Missile	Defense Systems	6188645.10
4	13670067	SM-6 (Standard Missile-6)	Defense Systems	9988078.10
5	13785968	Stinger Missile	Defense Systems	5227163.70

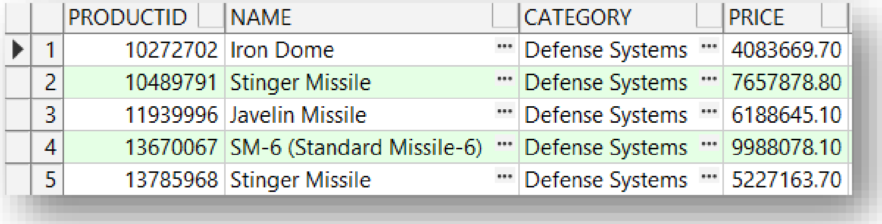
AFTER ROLLBACK

ROLLBACK & COMMIT : ROLLBACK

LEV & MISSILES
PRECISION, PROTECTION , GLOBAL SECURITY

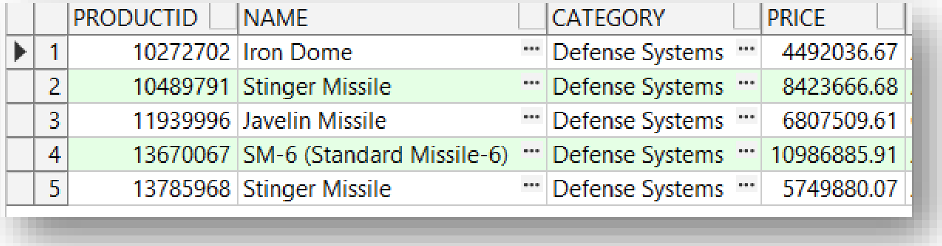


```
SELECT P.*
FROM Product P
WHERE P.CATEGORY = 'Defense Systems'
ORDER BY P.PRODUCTID ASC;

UPDATE PRODUCT
SET Price = Price * 1.10
WHERE PRODUCT.CATEGORY = 'Defense Systems';
COMMIT;

SELECT P.*
FROM Product P
WHERE P.CATEGORY = 'Defense Systems'
ORDER BY P.PRODUCTID ASC;

ROLLBACK;

SELECT P.*
FROM Product P
WHERE P.CATEGORY = 'Defense Systems'
ORDER BY P.PRODUCTID ASC;
```



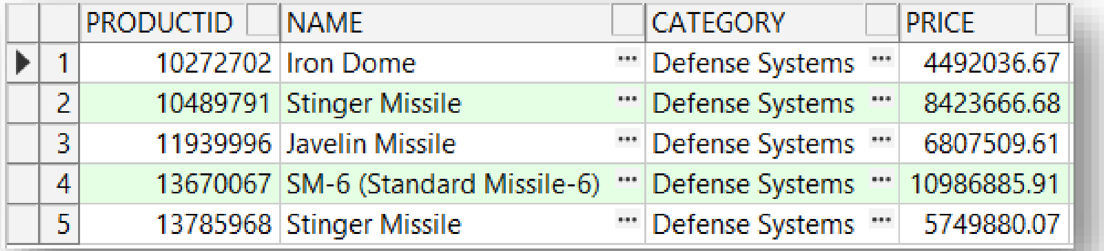
	PRODUCTID	NAME	CATEGORY	PRICE
1	10272702	Iron Dome	Defense Systems	4083669.70
2	10489791	Stinger Missile	Defense Systems	7657878.80
3	11939996	Javelin Missile	Defense Systems	6188645.10
4	13670067	SM-6 (Standard Missile-6)	Defense Systems	9988078.10
5	13785968	Stinger Missile	Defense Systems	5227163.70

FIRST SELECT



	PRODUCTID	NAME	CATEGORY	PRICE
1	10272702	Iron Dome	Defense Systems	4492036.67
2	10489791	Stinger Missile	Defense Systems	8423666.68
3	11939996	Javelin Missile	Defense Systems	6807509.61
4	13670067	SM-6 (Standard Missile-6)	Defense Systems	10986885.91
5	13785968	Stinger Missile	Defense Systems	5749880.07

UPDATED SELECT
PRICE*1.10+ COMMIT



	PRODUCTID	NAME	CATEGORY	PRICE
1	10272702	Iron Dome	Defense Systems	4492036.67
2	10489791	Stinger Missile	Defense Systems	8423666.68
3	11939996	Javelin Missile	Defense Systems	6807509.61
4	13670067	SM-6 (Standard Missile-6)	Defense Systems	10986885.91
5	13785968	Stinger Missile	Defense Systems	5749880.07

AFTER ROLLBACK
STAYED THE SAME

LEV & MISSILES

PRECISION, PROTECTION , GLOBAL SECURITY

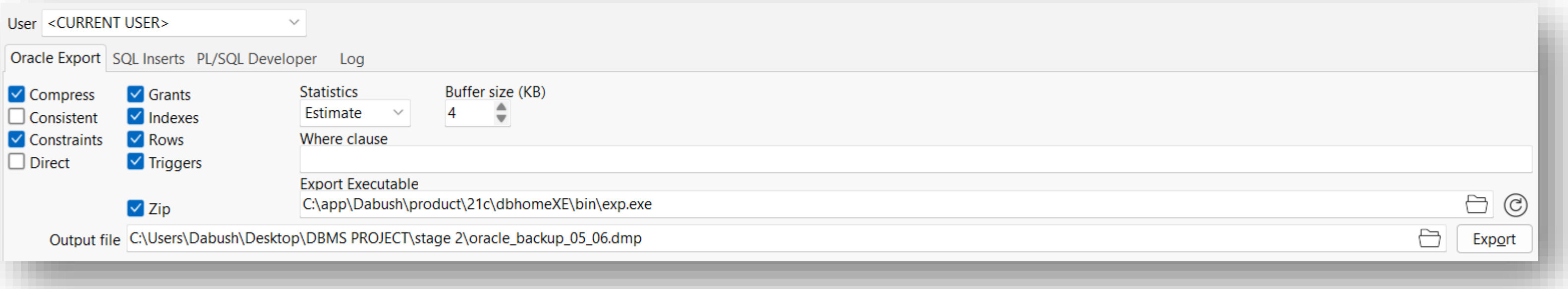
EXPORT BACKUP TABLES:

3 different ways to export the tables and create backup:

SQL insert

Pl/SQL developer

Oracle export



User <CURRENT USER>

Oracle Export | SQL Inserts | PL/SQL Developer | Log

☑ Compress
☐ Consistent
☑ Constraints
☐ Direct

☑ Grants
☑ Indexes
☑ Rows
☑ Triggers

☑ Zip

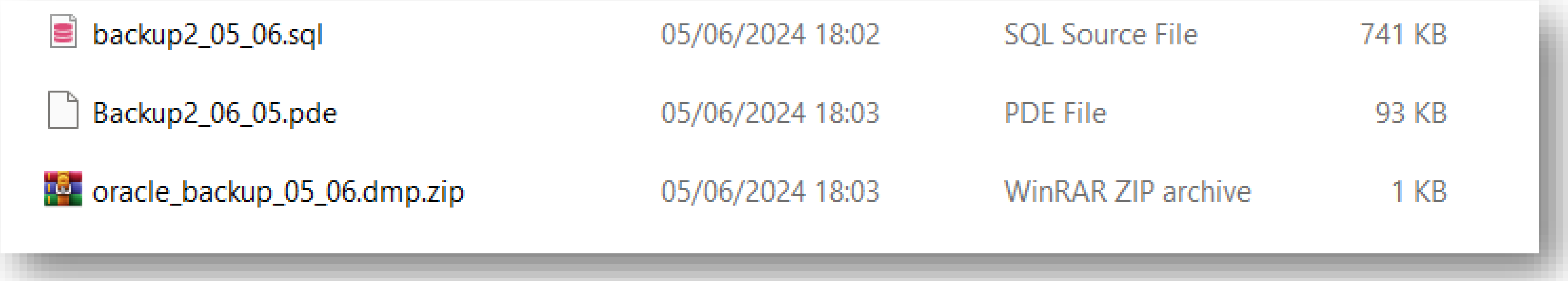
Statistics: Estimate

Buffer size (KB): 4

Where clause:

Export Executable: C:\app\Dabush\product\21c\dbhomeXE\bin\exp.exe

Output file: C:\Users\Dabush\Desktop\DBMS PROJECT\stage 2\oracle_backup_05_06.dmp



backup2_05_06.sql	05/06/2024 18:02	SQL Source File	741 KB
Backup2_06_05.pde	05/06/2024 18:03	PDE File	93 KB
oracle_backup_05_06.dmp.zip	05/06/2024 18:03	WinRAR ZIP archive	1 KB