

Create the following tables:

(Giving names to all the constraints are mandatory)

① Table Name : client_Master

Column Name	Data Type	Size	Constraints
client_no	varchar2	5	Primary key, Should C Not Null, Unique key
Name	varchar2	20	
Address1	varchar2	30	
State	varchar2	30	
City	varchar2	15	should be within Delhi, Mumbai, and chennai -

• Data for client_Master Table :

client_no	Name	Address1	state	city
C01	Ivan	church Rd	Maharashtra	Mumbai
C02	Vandana	St. Mary Rd	Tamil Nadu	chennai
C03	Pramada	Mall Rd	Maharashtra	Mumbai
C04	Basu	church Rd	Maharashtra	Mumbai
C05	Rari	chandni	null	Delhi
C06	Rukmini	Mall Rd	Maharashtra	Mumbai

• CREATE TABLE client_Master (

client_no varchar(5),
Name varchar(20),
Address1 varchar(30),
State varchar(30),
City varchar(15),

CONSTRAINT pk-client_Master PRIMARY KEY (client_no),
CONSTRAINT ck-client-no-format CHECK (client_no) LIKE 'C%')

);

• INSERT INTO client-Master (client-no, name, ,
 VALUES
 ("C01", "Iraan", "church Rd", "Maharashtra", "Mumbai"),
 ("C02", "Vandana", "St. Mary Rd", "Tamil Nadu", "chennai"),
 ("C03", "Pramada", "Mall Rd", "Maharashtra", "Mumbai"),
 ("C04", "Basu", "church Rd", "Maharashtra", "Mumbai"),
 ("C05", "Ravi", "Chandni", "null", "Delhi"),
 ("C06", "Rukmini", "Mall Rd", "Maharashtra", "Mumbai");

⑥ Table Name : Sales - Order

Column Name	Data Type	size	constraints
S-order - no	varchar2	10	Primary key, should start with S.
S-order - date	Date	5	Foreign key references client-no of client - Master table .
client - no	varchar2	10	should start with G .
Salesman - no	varchar2	10	Foreign key references product-no of product - Master table .
product - no	varchar2	10	

• CREATE TABLE Sales - Order (

S-order - no	varchar2 (10),
S-order - date	Date ,
client - no	varchar2 (5) ,
Salesman - no	varchar2 (10) ,

(C)

Table Name : Products-Master

Column Name	Data Type	Size	Constraints
Product-no	varchar2	10	Primary key, should start with P
Description	varchar2	20	NOT NULL, Unique key
Qty-on-hand	Number	8	should be greater than 10
Sell-price	Number	8,2	NOT NULL
Cost-price	Number	8,2	NOT NULL

• CREATE TABLE Product-Master (

product-no

Description

Qty-on-hand

Sell-price

Cost-price

CONSTRAINT PK_products-master PRIMARY KEY (product-no),

CONSTRAINT CK_products-no-format CHECK (product-no LIKE 'P%'),

CONSTRAINT UQ_product-description UNIQUE (Description),

CONSTRAINT CK_qty-positive CHECK (Qty-on-hand > 10)

);

• Data for table Products-Master :

Product-no	Description	Qty-on-hand	Sell-price	Cost-price
P01	1.44 Floppies	100	525	500
P02	Monitors	25	12000	11280
P03	Mouse	20	1050	1000
P04	1.22 floppies	100	525	500
P05	Keyboards	15	3150	3050
P06	CD-Drive	14	5250	5100

• INSERT INTO Product-Master (Product-no, Description, Qty-on-hand, Sell-price, Cost-price)

VALUES

('P01', '1.44 Floppies', 100, 525, 500),
 ('P02', 'Monitors', 25, 12000, 11280),
 ('P03', 'Mouse', 20, 1050, 1000),
 ('P04', '1.22 Floppies', 100, 525, 500),
 ('P05', 'keyboards', 15, 3150, 3050),
 ('P06', 'cd Daire', 14, 5250, 5100);

Add a NOT NULL constraint on the Address1 field of Client-Master table and display the structure of the table.

• ALTER TABLE Client-Master
 MODIFY ADDRESS1 VARCHAR(30) NOT NULL;

• DESC Client-Master;

Field	Type	NULL	KEY	Default
client-no	varchar(5)	NO	PRI	NULL
Name	varchar(20)	YES		NULL
Address1	varchar(30)	NO		NULL
State	varchar(30)	YES		NULL
City	varchar(15)	YES		NULL

calculate the profit (Sell-price - Cost-price) from the products-Master table. Name the column as 'Profit'.

• SELECT Product-no,
 Description,
 Sell-price,
 Cost-price,
 (Sell-price-Cost-price) AS Profit
 FROM Products-Master,

Product-no	Description	Sell-price	Cost-price	Profit
P01	1.44 Floppies	525	500	25
P02	Monitors	12000	11280	720
P03	Mouse	1050	1000	50
P04	1.22 Floppies	525	500	25
P05	Keyboards	3150	3050	100
P06	CD-Driver	5250	5100	150

4. calculate and display the total cost price ($\text{Qty-on-hand} * \text{cost-price}$) of the stock present in hand . Name the column accordingly .

- SELECT Product-no ,
Description ,
Qty-on-hand ,
cost-price ,
 $(\text{Qty-on-hand} * \text{cost-price})$ AS Total-cost-price
FROM Products-Master ;

Product-no	Description	Qty-on-hand	Cost-price	Total-cost
P01	1.44 Floppies	100	500	5000
P02	Monitors	25	11280	282000
P03	Mouse	20	1000	20000
P04	1.22 Floppies	100	500	50000
P05	Keyboards	15	3050	45750
P06	CD-Driver	14	5100	71400

5. display the client details of all the clients whose name starts with I .

- SELECT * FROM Client-Master WHERE Name LIKE 'I%' ;

client-no	Name	Address L	State	City
C01	Iraan	Church Rd	Maharashtra	Mumbai

Display the client details of all the clients whose name start with R and ends with i .

• SELECT * FROM client-Master WHERE Name LIKE 'R%_i';

client-no	Name	Address L	state	city
C05	Ravi	chandni Mall Rd	null	Delhi
C06	Rukmini		Maharashtra	Mumbai

Display the client details of all the clients whose name contains a in the third and fifth position .

• SELECT * FROM client-Master WHERE Name LIKE '%_a_a%';

client-no	Name	Address L	state	city
C03	Pramada	Mall Rd	Maharashtra	Mumbai

Display the client details of all the clients whose name contains aa .

• SELECT * FROM client-Master WHERE Name LIKE '%.aa.%';

client-no	Name	Address L	state	city
C01	Iraan	church Rd	Maharashtra	Mumbai

Display the client details of those client whose name contains exactly four characters .

• SELECT * FROM client-Master WHERE LENGTH (Name) = 4 ;

client-no	Name	Address L	state	city
C04	Baau	church Rd	Maharashtra	Mumbai
C05	Ravi	chandni	null	Delhi

Display the clients details of those clients who have not mentioned state in his / her address .

• SELECT * FROM client-Master WHERE state IS NULL ;

client-no	Name	Address L	state	city
C05	Ravi	chandni	null	Delhi

Remove those records from Product-Master Table for which sell price is between 1000 and 10000 .

- `DELETE FROM Sales-order
WHERE Product-no IN (SELECT Product-no FROM Product-Master
WHERE Sell-price between 1000 AND 10000);`
- `DELETE FROM Products-Master
WHERE Sell-price Between 1000 AND 10000;`
- `SELECT * FROM Product-Master;`

Product-no	Description	Qty-on-hand	Sell-price	Cost-price
P01	1.44 Floppies	1000	525	500
P02	Monitors	25	12000	11280
P04	1.22 Floppies	100	525	500

Create a Table of your own with a composite primary key .

- `CREATE TABLE student_course (`
student-id varchar(5) ,
course-id varchar(5) ,
Enrollment-date Date ,
Curade INT ,
CONSTRAINT PK_student_course PRIMARY KEY (student-id ,
course-id)
) ;

- `INSERT INTO student_course (student-id , course-id , Enrollment
date , Curade)`

`VALUES`

`('S01' , 'C01' , '2023-08-01' , 'A') ,
('S01' , 'C02' , '2023-08-05' , 'B') ,
('S02' , 'C01' , '2023-08-01' , 'A') ,
('S03' , 'C03' , '2023-08-10' , 'C') ;`

Student-id	Course-id	Enrollment-date	Grade
S01	C01	2023-Aug-01	A
S01	C02	2023-Aug-05	B
S02	C01	2023-Aug-01	A
S03	C03	2023-Aug-10	C

• `INSERT INTO student course VALUES ("S01", "C01", '2023-08-12', 'B');`

You will get an error.

✓
Abi 22/9/25