Practical 2: Study and implementation of different types of constraints.

Create the tables described below

PRODUCT_MASTER

SALESMAN_MASTER

SELLPRICE	Between 10000 to 80000		
COSTPRICE	>1000		
Column Name	Datatype	Size	
Product_No	Char	6	
Description	Varchar2	15	
ProfitPercent	Number	4,2	
UnitMeasure	Varchar2	10	
SellPrice	Number	8,2	
CostPrice	Number	8,2	

Column Name	Datatype	Size	Constraints
Salesman_No	Char	6	Primary Key
SalesmanName	Varchar2	20	Not Null
Address	Varchar2	30	Not Null
City	Varchar2	20	
PinCode	Number	6	
State	Varchar2	20	
SalAmt	Number	8,2	Not Null
PINCODE	UNIQUE		
CITY	CAN'T BE NAGPUR		

Client_Master

Column Name	Datatype	Size	Constraints
Client_No	Char	6	Primary Key
Name	Varchar2	20	Not Null
Address	Varchar2	100	
City	Varchar2	15	
Pincode	Number	6	
State	Varchar2	20	
Bal_Due	Number	8,2	

Sales_Order

Column Name	Datatype	Size	Default	Constraints
Order_No	Char	6		Primary Key
Client_No	Char	6		Foreign Key References Client_No of Client_Master Table

OrderDate	Date			Not Null
Salesman_No	Char	6		Foreign Key References Salesman_No of Salesman_Master Table

Code :

```
CREATE TABLE PRODUCT_MASTER (
    Product_No CHAR(6) PRIMARY KEY,
    Description varchar2(15) not null,
    ProfitPercent number(4,2) not null,
    UnitMeasure varchar2(10) not null,
    SellPrice number(8,2) not null check (SellPrice between 10000 and 80000),
    CostPrice number(8,2) not null check (CostPrice > 1000)
);
desc PRODUCT_MASTER;
```

Results | Explain | **Describe** | Saved SQL | History

Object Type **TABLE** ⓘ   Object **PRODUCT_MASTER** ⓘ

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
PRODUCT_MASTER	PRODUCT_NO	CHAR	6	-	-	1	-	-	-
	DESCRIPTION	VARCHAR2	15	-	-	-	-	-	-
	PROFITPERCENT	NUMBER	-	4	2	-	-	-	-
	UNITMEASURE	VARCHAR2	10	-	-	-	-	-	-
	SELLPRICE	NUMBER	-	8	2	-	-	-	-
	COSTPRICE	NUMBER	-	8	2	-	-	-	-

```
CREATE TABLE SALESMAN_MASTER (
    Salesman_No char(6) primary key,
    SalesmanName varchar2(20) not null,
    Address varchar2(30) not null,
    City varchar2(20) check(City <> 'nagpur'),
    PinCode number(6) unique,
    State varchar2(20),
    SalAmt number(8,2)
);
```

desc SALESMAN_MASTER;

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
SALESMAN_MASTER	SALESMAN_NO	CHAR	6	-	-	1	-	-	-
	SALESMANNAME	VARCHAR2	20	-	-	-	-	-	-
	ADDRESS	VARCHAR2	30	-	-	-	-	-	-
	CITY	VARCHAR2	20	-	-	-	✓	-	-
	PINCODE	NUMBER	-	6	0	-	✓	-	-
	STATE	VARCHAR2	20	-	-	-	✓	-	-
	SALAMT	NUMBER	-	8	2	-	✓	-	-

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CREATE TABLE CLIENT_MASTER (
    Client_No char(6) primary key,
    Name varchar2(20) not null,
    Address varchar2(100),
    City varchar2(15),
    Pincode number(6),
    State varchar2(20),
    Bal_Due number(8,2)
);

desc CLIENT_MASTER;

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CLIENT_MASTER	CLIENT_NO	CHAR	6	-	-	1	-	-	-
	NAME	VARCHAR2	20	-	-	-	-	-	-
	ADDRESS	VARCHAR2	100	-	-	-	✓	-	-
	CITY	VARCHAR2	15	-	-	-	✓	-	-
	PINCODE	NUMBER	-	6	0	-	✓	-	-
	STATE	VARCHAR2	20	-	-	-	✓	-	-
	BAL_DUE	NUMBER	-	8	2	-	✓	-	-

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CREATE TABLE SALES_ORDER (
    Order_no char(6) primary key,
    Client_No char(6),
    OrderDate date not null,
    Salesman_No char(6),
    foreign key(Client_No) references CLIENT_MASTER(Client_No),
    foreign key(Salesman_No) references SALESMAN_MASTER(Salesman_No)
);

desc SALES_ORDER;

| | Object Type | **TABLE** ⑦ | | Object | **SALES_ORDER** ⑦ | | | | | |

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
SALES_ORDER	ORDER_NO	CHAR	6	-	-	1	-	-	-
	CLIENT_NO	CHAR	6	-	-	-	✓	-	-
	ORDERDATE	DATE	7	-	-	-	-	-	-
	SALESMAN_NO	CHAR	6	-	-	-	✓	-	-