ASSIGNMENT NO.3

Question.2 Create the following tables:

i. Sales_master

Columnname	Datatype	Size	Attributes
Salesman_no	varchar2	6	Primary key/first letter must start with 's'
Sal_name	varchar2	20	Not null
Address	varchar2		Not null
City	varchar2	20	
State	varchar2	20	
Pincode	Number	6	
Sal_amt	Number	8,2	Not null, cannot be 0
Tgt_to_get	Number	6,2	Not null, cannot be 0
Ytd_sales	Number	6,2	Not null, cannot be 0
Remarks	Varchar2	30	

```
CREATE TABLE sales_master(
salesman_no VARCHAR2(6),
sal_name VARCHAR2(20) not null,
address VARCHAR2(20) not null,
city VARCHAR2(20),
state VARCHAR(20),
pincode NUMBER(6),
sal_amt NUMBER(8,2) NOT NULL,
tgt_to_get NUMBER(6,2) NOT NULL,
ytd_sales NUMBER(6,2) NOT NULL,
remarks VARCHAR2(30)
);

ALTER TABLE sales_master ADD CONSTRAINT m1 PRIMARY KEY(salesman_no);
ALTER TABLE sales_master ADD CONSTRAINT m2 CHECK(salesman_no like 's%');
ALTER TABLE sales_master ADD CONSTRAINT m3 CHECK(sal_amt>0);
ALTER TABLE sales_master ADD CONSTRIANT m4 CHECK(tgt_to_get>0);
ALTER TABLE sales_master ADD CONSTRAINT m5 CHECK(ytd_sales>0);
```

ii. Sales_order

Columnname	Datatype	Size	Attributes
S_order_no	varchar2	6	Primary/first letter must be 0
S_order_date	Date	6	Primary key reference clientno of client_master table
Client_no	Varchar2	25	
Dely_add	Varchar2	6	
Salesman_no	Varchar2	6	Foreign key references salesman_no of salesman_master table
Dely_type	Char	1	Delivery part(p)/full(f),default f
Billed_yn	Char	1	
Dely_date	Date		Can not be lessthan s_order_date
Order_status	Varchar2	10	Values ('in process';'fulfilled';back order';'canceled

```
CREATE TABLE sales_order(
 s_order_no VARCHAR2(6),
 s_order_date DATE,
 client_no VARCHAR2(6),
 dely_add VARCHAR2(6),
 salesman_no VARCHAR2(6),
 dely_type CHAR(1),
 billed_yn CHAR(1),
 dely_date DATE,
 order_status VARCHAR2(10)
);

ALTER TABLE sales_order ADD CONSTRAINT m6 PRIMARY KEY(s_order_no);
ALTER TABLE sales_order ADD CONSTRAINT m7 CHECK(s_order_no LIKE 'o%');
ALTER TABLE sales_order ADD CONSTRAINT m8 FOREIGN KEY(client_no) REFERENCES
client_master;
ALTER TABLE sales_order ADD CONSTRAINT m9 FOREIGN KEY(salesman_no) REFERENCES
sales_master ;
ALTER TABLE sales_order ADD CONSTRAINT m10 CHECK(dely_type IN('p', 'f'));
ALTER TABLE sales_order ADD CONSTRAINT m11 CHECK(dely_date>s_order_date);
ALTER TABLE sales_order ADD CONSTRAINT m12 CHECK(order_status IN('fullfilled',
'in process', 'back order', 'cancelled'));
```

I. Sales_order_details

Column	Datatype	Size	Attributes
S_order_no	Varchar2	6	Primary key/foreign key references s_order_no of sales_order
Product_no	Varchar2	6	Primary key/foreign key references product_no of product_master
Qty_order	Number	8	
Qty_disp	Number	8	
Product_rate	Number	10,2	

```
CREATE TABLE sales_order_details(
 s_order_no VARCHAR2(6),
 product_no VARCHAR2(10),
 qty_order NUMBER(6),
 qty_disp NUMBER(6),
 product_rate NUMBER(10,2)
);

ALTER TABLE sales_order_details ADD CONSTRAINT m13 FOREIGN KEY(s_order_no)
REFERENCES sales_order;
ALTER TABLE sales_order_details ADD CONSTRAINT m14 FOREIGN KEY(product_no)
REFERENCES product_master;
```

Data for sales_man master table

Salesman_no	Salesman name	Address	City	Pin code	State	Salamt	Tgt_to_get	Ytd Sales	Rem
500001	Kiran	A/14 worli	Bom bay	400002	Mah	3000	100	50	Goo
500002	Manish	65,nariman	Bom bay	400001	Mah	3000	200	100	Goo
500003	Ravi	P-7 Bandra	Bom bay	400032	Mah	3000	200	100	Goo
500004	Ashish	A/5 Juhu	Bom bay	400044	Mah	3500	200	150	Goo

```
INSERT INTO sales_master(salesman_no, sal_name, address, city, state, pincode,
sal_amt, tgt_to_get, ytd_sales, remarks) VALUES('s00001', 'kiran', 'a/14 worli',
'Bombay', 'Mah', 400002, 3000, 100, 50, 'Good');
INSERT INTO sales_master(salesman_no, sal_name, address, city, state, pincode,
sal_amt, tgt_to_get, ytd_sales, remarks) VALUES('s00002', 'manish', '65
nariman', 'Bombay', 'Mah', 400001, 3000, 200,100, 'Good');
INSERT INTO sales_master(salesman_no, sal_name, address, city, state, pincode,
sal_amt, tgt_to_get, ytd_sales, remarks) VALUES('s00003', 'ravi', 'p_7 bandra',
'Bombay', 'Mah', 400032, 3000, 200, 100, 'Good');
insert into sales_master(salesman_no, sal_name, address, city, state, pincode,
sal_amt, tgt_to_get, ytd_sales, remarks) VALUES('s00004', 'ashish', 'a/5 juhu',
'Bombay', 'Mah', 400044, 3000, 200, 150, 'Good');
```

SALESMAN_NO	SAL_NAME	ADDRESS	CITY	STATE	PINCODE	SAL_AMT	TGT_TO_GET	YTD_SALES	REMARKS
s00001	kiran	a/14 worli	Bombay	Mah	400002	3000	100	50	Good
s00002	manish	65 nariman	Bombay	Mah	400001	3000	200	100	Good
s00003	ravi	p_7 bandra	Bombay	Mah	400032	3000	200	100	Good
s00004	ashish	a/5 juhu	Bombay	Mah	400044	3000	200	150	Good

Data for salesorder table:

S_orderno	S_orderdate	Client no	Dely type	Bill yn	Salesman no	Delay date	Orderstatus
019001	12-jan-96	0001	F	N	50001	20-jan-96	Ip
019002	25-jan-96	0002	P	N	50002	27-jan-96	C
016865	18-feb-96	0003	F	Y	500003	20-feb-96	F
019003	03-apr-96	0001	F	Y	500001	07-apr-96	F
046866	20-may-96	0004	P	N	500002	22-may-96	C
010008	24-may-96	0005	F	N	500004	26-may-96	Ip

```
INSERT INTO sales_order(s_order_no, s_order_date, client_no, dely_add,
salesman_no, dely_type, billed_yn, dely_date, order_status) VALUES('o19001',
'12-jan-96', '0001', '', 's00001', 'f', 'n', '20-jan-96', 'in process');
INSERT INTO sales_order(s_order_no, s_order_date, client_no, dely_add,
salesman_no, dely_type, billed_yn, dely_date, order_status) VALUES('o19002',
'25-jan-96', '0002', '', 's00002', 'p', 'n', '27-jan-96', 'cancelled');
```

```
INSERT INTO sales_order(s_order_no, s_order_date, client_no, dely_add,
salesman_no, dely_type, billed_yn, dely_date, order_status) VALUES('o16865',
'18-feb-96', '0003', '', 's00003', 'f', 'y', '20-feb-96', 'fullfilled');
INSERT INTO sales_order(s_order_no, s_order_date, client_no, dely_add,
salesman_no, dely_type, billed_yn, dely_date, order_status) VALUES('o19003',
'3-apr-96', '0001', '', 's00001', 'f', 'y', '7-apr-96', 'fullfilled');
INSERT INTO sales_order(s_order_no, s_order_date, client_no, dely_add,
salesman_no, dely_type, billed_yn, dely_date, order_status) VALUES('o46866',
'20-may-96', '0004', '', 's00002', 'p', 'n', '22-may-96', 'cancelled');
INSERT INTO sales_order(s_order_no, s_order_date, client_no, dely_add,
salesman_no, dely_type, billed_yn, dely_date, order_status) VALUES('o10008',
'24-may-96', '0005', '', 's00004', 'f', 'n', '26-may-96', 'in process');
```

S_ORDER_NO	S_ORDER_DATE	CLIENT_NO	DELY_ADD	SALESMAN_NO	DELY_TYPE	BILLED_YN	DELY_DATE	ORDER_STATUS
o19001	12-JAN-96	0001	-	s00001	f	n	20-JAN-96	in process
o19002	25-JAN-96	0002	-	s00002	p	n	27-JAN-96	cancelled
o16865	18-FEB-96	0003	-	s00003	f	y	20-FEB-96	fullfilled
o19003	03-APR-96	0001	-	s00001	f	y	07-APR-96	fullfilled
o46866	20-MAY-96	0004	-	s00002	p	n	22-MAY-96	cancelled
o10008	24-MAY-96	0005	-	s00004	f	n	26-MAY-96	in process

Data for sales_order_details table:

S_order no	Product no	Qty ordered	Qty disp	Product_rate
019001	P00001	4	4	525
019001	P07965	2	1	8400
019001	P07885	2	1	5250
019002	P00001	10	0	525
046865	P07868	3	3	3150
046865	P07885	10	10	5250
019003	P00001	4	4	1050
019003	P03453	2	2	1050
046866	P06734	1	1	12000
046866	P07965	1	0	8400
010008	P07975	1	0	1050
010008	P00001	10	5	525

```
INSERT INTO sales_order_details(s_order_no, product_no, qty_order, qty_disp,
product_rate) VALUES('o19001', 'P00001', 4, 4, 525);
INSERT INTO sales_order_details(s_order_no, product_no, qty_order, qty_disp,
product_rate) VALUES('o19001', 'P07965', 2, 1, 8400);
INSERT INTO sales_order_details(s_order_no, product_no, qty_order, qty_disp,
product_rate) VALUES('o19001', 'P07885', 2, 1, 5250);
INSERT INTO sales_order_details(s_order_no, product_no, qty_order, qty_disp,
product_rate) VALUES('o19002', 'P00001', 10, 0, 525);
INSERT INTO sales_order_details(s_order_no, product_no, qty_order, qty_disp,
product_rate) VALUES('o16865', 'P07868', 3, 3, 3150);
INSERT INTO sales_order_details(s_order_no, product_no, qty_order, qty_disp,
product_rate) VALUES('o16865', 'P07885', 10, 10, 5250);
INSERT INTO sales_order_details(s_order_no, product_no, qty_order, qty_disp,
product_rate) VALUES('o19003', 'P00001', 4, 4, 1050);
INSERT INTO sales_order_details(s_order_no, product_no, qty_order, qty_disp,
product_rate) VALUES('o19003', 'P03453', 2, 2, 1050);
```

```
INSERT INTO sales_order_details(s_order_no, product_no, qty_order, qty_disp,
product_rate) VALUES('o46866', 'P06734', 1, 1, 12000);
INSERT INTO sales_order_details(s_order_no, product_no, qty_order, qty_disp,
product_rate) VALUES('o46866', 'P07965', 1, 0, 8400);
INSERT INTO sales_order_details(s_order_no, product_no, qty_order, qty_disp,
product_rate) VALUES('o10008', 'P07965', 1, 0, 1050);
INSERT INTO sales_order_details(s_order_no, product_no, qty_order, qty_disp,
product_rate) VALUES('o10008', 'P00001', 10, 5, 525);
```

S_ORDER_NO	PRODUCT_NO	QTY_ORDER	QTY_DISP	PRODUCT_RATE
o19001	P00001	4	4	525
o19001	P07965	2	1	8400
o19001	P07885	2	1	5250
o19002	P00001	10	0	525
o16865	P07868	3	3	3150
o16865	P07885	10	10	5250
o19003	P00001	4	4	1050
o19003	P03453	2	2	1050
o46866	P06734	1	1	12000
o46866	P07965	1	0	8400
o10008	P07965	1	0	1050
o10008	P00001	10	5	525

ASSIGNMENT NO.4

Question 1. Create the following tables:

Challan_Header

Column name	data type	size	Attributes
Challan_no	varchar2	6	Primary key
s_order_no	varchar2	6	Foreign key references s_order_no of sales_order table
challan_date	date		not null
billed_yn	char	1	values ('Y','N'). Default 'N'

```
CREATE TABLE challan_header(
challan_no VARCHAR2(6),
s_order_no VARCHAR2(6),
challan_date DATE NOT NULL,
billed_yn CHAR(1)
);

ALTER TABLE challan_header ADD CONSTRAINT m15 PRIMARY KEY(challan_no);
ALTER TABLE challan_header ADD CONSTRAINT m16 FOREIGN KEY(s_order_no)
REFERENCES sales_order;
ALTER TABLE challan_header ADD CONSTRAINT m17 CHECK(billed_yn IN('y','n'));
```

Table Name : Challan_Details

Column name	data type	size	Attributes
Challan_no	varchar2	6	Primary key/Foreign key references Product_no of product_master
Qty_disp	number	4,2	not null

```
CREATE TABLE challan_details(
challan_no VARCHAR2(6),
product_no VARCHAR2(6),
qty_disp NUMBER(4,2) NOT NULL
);

ALTER TABLE challan_details ADD CONSTRAINT m18 FOREIGN KEY(challan_no)
REFERENCES challan_header;
ALTER TABLE challan_details ADD CONSTRAINT m19 FOREIGN KEY(product_no)
REFERENCES product_master;
```

Q2. Insert the following values into the challan header and challan_details tables:

(i)

Challan No	S_order No	Challan Date	Billed
CH9001	019001	12-DEC-95	Y
CH865	046865	12-NOV-95	Y
CH3965	010008	12-OCT-95	Y

```
INSERT INTO challan_header(challan_no, s_order_no, challan_date, billed_yn)
VALUES('CH9001', 'o19001', '12-DEC-95', 'y');
INSERT INTO challan_header(challan_no, s_order_no, challan_date, billed_yn)
VALUES('CH6865', 'o46866', '12-NOV-95', 'y');
INSERT INTO challan_header(challan_no, s_order_no, challan_date, billed_yn)
VALUES('CH3965', 'o10008', '12-OCT-95', 'y');
```

CHALLAN_NO	S_ORDER_NO	CHALLAN_DATE	BILLED_YN
CH9001	o19001	12-DEC-95	y
CH6865	o46866	12-NOV-95	y
CH3965	o10008	12-OCT-95	y

Data for challan_details table

Challan No	Product No	Qty Disp
CH9001	P00001	4
CH9001	P07965	1
CH9001	P07885	1
CH6865	P07868	3
CH6865	P03453	4
CH6865	P00001	10
CH3965	P00001	5
CH3965	P07975	2

```
INSERT INTO challan_details(challan_no, product_no, qty_disp) VALUES('CH9001',
'P07965', 1);
INSERT INTO challan_details(challan_no, product_no, qty_disp) VALUES('CH9001',
'P07885', 1);
INSERT INTO challan_details(challan_no, product_no, qty_disp) VALUES('CH6865',
'P07868', 3);
INSERT INTO challan_details(challan_no, product_no, qty_disp) VALUES('CH6865',
'P03453', 4);
INSERT INTO challan_details(challan_no, product_no, qty_disp) VALUES('CH6865',
'P00001', 10);
INSERT INTO challan_details(challan_no, product_no, qty_disp) VALUES('CH3965',
'P00001', 5);
INSERT INTO challan_details(challan_no, product_no, qty_disp) VALUES('CH3965',
'P07975', 2);
```

CHALLAN_NO	PRODUCT_NO	QTY_DISP
CH9001	P07965	1
CH9001	P07885	1
CH6865	P07868	3
CH6865	P03453	4
CH6865	P00001	10
CH3965	P00001	5

Objective – Answer the following Questionries

Q1. Make the primary key to client_no in client_master.
Q2. Add a new column phone_no in the client_master table.
Q3. Add the not null constraint in the product_master table with the columns description,
profit percent , sell price and cost price.
Q4. Change the size of client_no field in the client_master table.
Q5. Select product_no, description where profit percent is between 20 and 30 both
inclusive.

（1）ALTER TABLE client_master ADD CONSTRAINT something PRIMARY KEY(client_no);

（2）ALTER TABLE client_master ADD phone_number NUMBER(10);

（3）ALTER TABLE product_master MODIFY(description NOT NULL, profit_percent NOT NULL, sell_price NOT NULL, cost_price NOT NULL);

（4）ALTER TABLE client_master MODIFY client_no VARCHAR2(10);

（5）SELECT product_no, description FROM product_master WHERE profit_percent>20 and profit_percent<30;