PRACTICAL -8

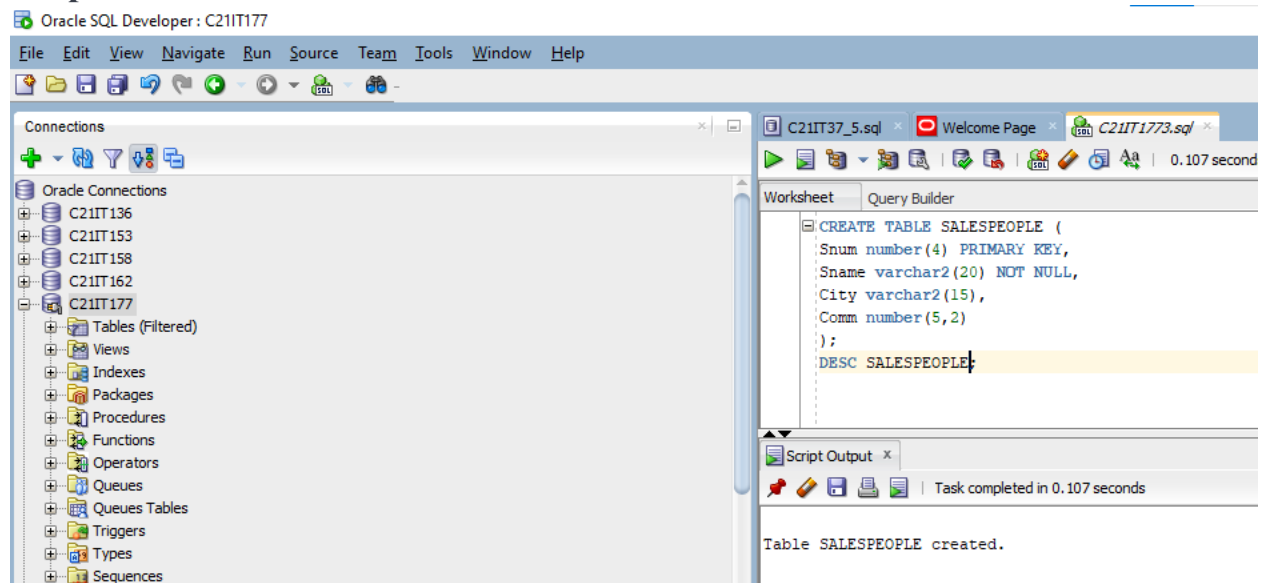**Aim:** **To apply the concept of integrity/data constraints while creating or altering table.**

Query-1: **Create Table Salespeople**

SQL Statement:
CREATE TABLE SALESPEOPLE (
Snum number(4) PRIMARY KEY,
Sname varchar2(20) NOT NULL,
City varchar2(15),
Comm number(5,2)
);
DESC SALESPEOPLE;

Output:


```
Name   Null?      Type
-----  --------   ------------
SNUM   NOT NULL   NUMBER(4)
SNAME  NOT NULL   VARCHAR2(20)
CITY              VARCHAR2(15)
COMM              NUMBER(5,2)
```
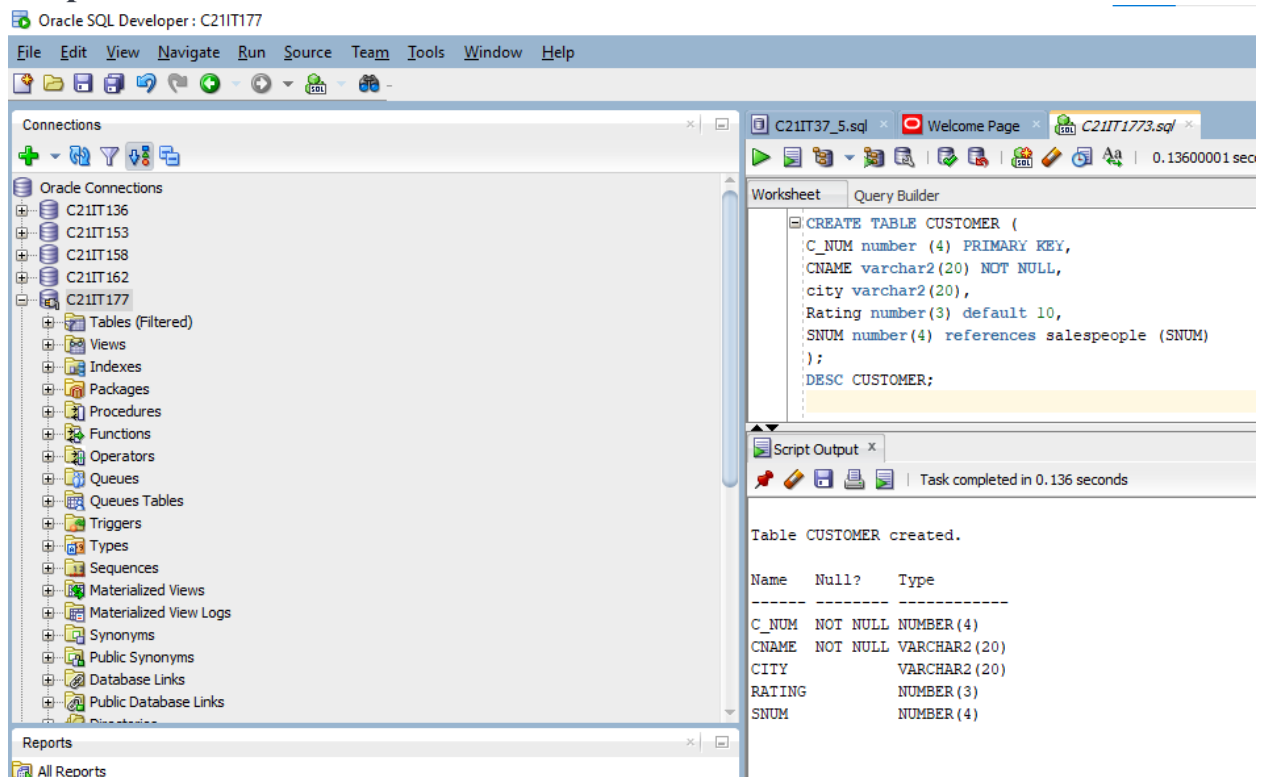
Query-2: **Create table CUSTOMER**

SQL Statement:
CREATE TABLE CUSTOMER (
C_NUM number (4) PRIMARY KEY,
CNAME varchar2(20) NOT NULL,
city varchar2(20),
Rating number(3) default 10,
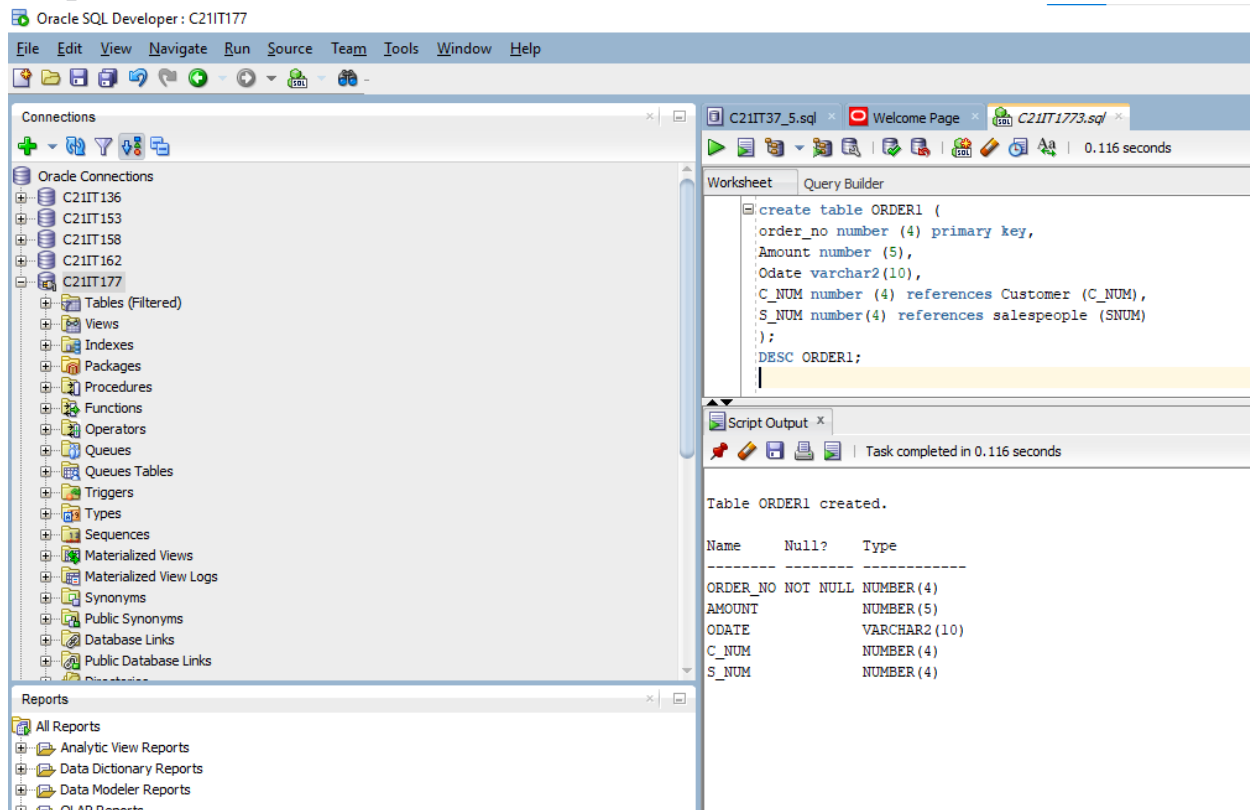SNUM number(4) references salespeople (SNUM)
);
DESC CUSTOMER;

Output:

Query-3: **Create table Order**

SQL Statement:
create table ORDER1 (
order_no number (4) primary key,
Amount number (5),

Odate varchar2(10),
C_NUM number (4) references Customer (C_NUM),
S_NUM number(4) references salespeople (SNUM)
);
DESC ORDER1;

Output:

...

Query-4: Create Table Client_master

Column name	Data type	Constraints
Client_no	Varchar2(6)	Primary key/first letter must start with 'C'
Name	Varchar2(20)	Not null
Address	Varchar2(30)	
City	Varchar2(15)	
Pincode	Number(8)	
State	Varchar2(15)	
Bal_due	Number(10,2)	

SQL Statement:

 create table CLIENT_MASTER (
CLIENT_NO varchar2(6) PRIMARY KEY CHECK(CLIENT_NO like 'C%'),
NAME VARCHAR2(20) NOT NULL,
Address Varchar2(30),
City Varchar2(15),
PINCODE NUMBER(8),
STATE VARCHAR2(15),
Bal_due number(10,2)
);
DESC CLIENT_MASTER;

Output:

Query-5: Create Table Sales_Master

5. Table: salesman_master

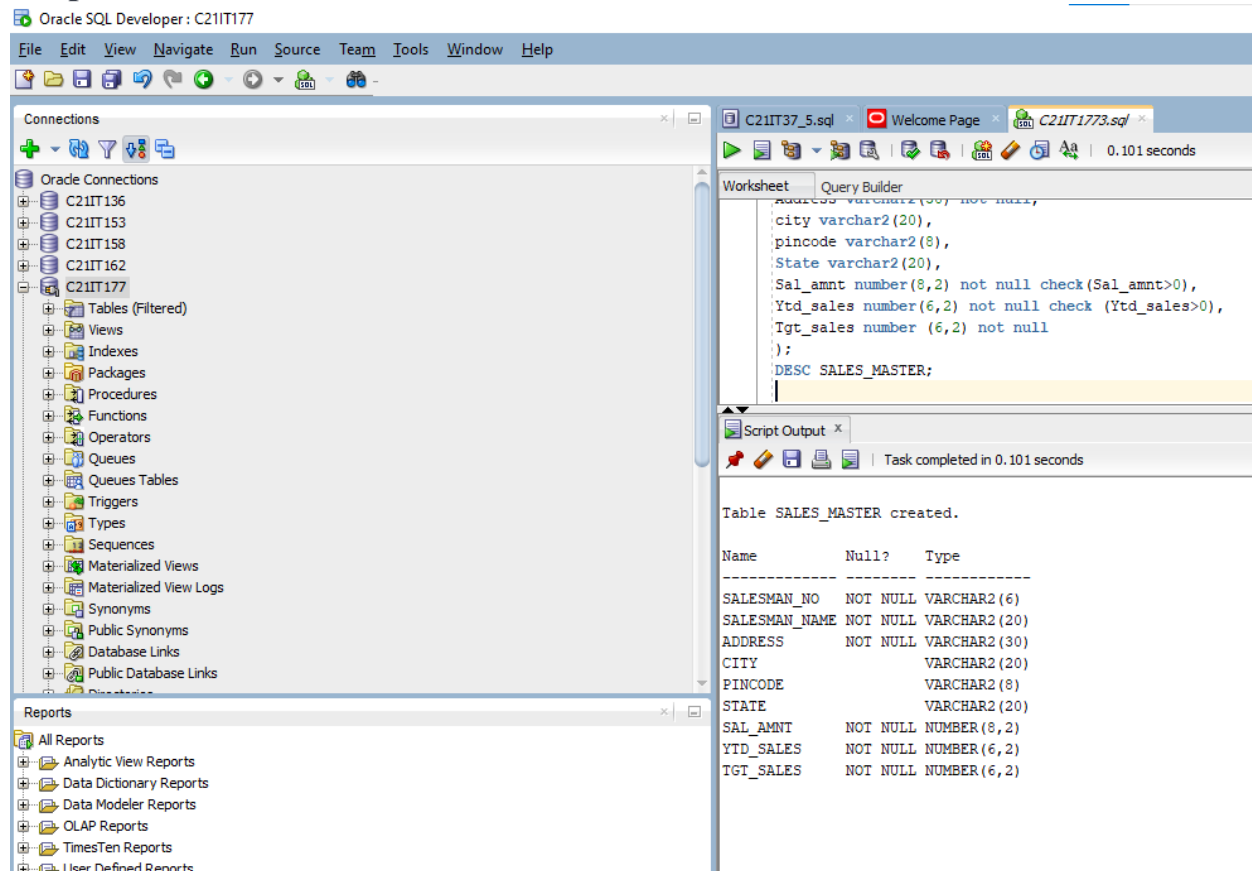| Column name	Data type	Constraints
Salesman_no	Varchar2(6)	Primary key/first letter must start with 'S'
Salesman _name	Varchar2(20)	Not null
Address	Varchar2(30)	Not null
City	Varchar2(20)	
Pincode	Varchar2(8)	
State	Varchar2(20)	
Sal_amt	Number(8,2)	Not null, cannot be 0
Ytd_sales	Number(6,2)	Not null, cannot be 0
Tgt_sales	Number(6,2)	Not null

SQL Statement:

create table SALES_MASTER (
salesman_no varchar2(6) primary key check (salesman_no like '%'),
salesman_name varchar2(20) not null,
Address varchar2(30) not null,
city varchar2(20),
pincode varchar2(8),
State varchar2(20),
Sal_amnt number(8,2) not null check(Sal_amnt>0),
Ytd_sales number(6,2) not null check (Ytd_sales>0),
Tgt_sales number (6,2) not null
);
DESC SALES_MASTER;

Output:

Query-6: Create Table Sales Order

Column Name	Data Type	Contraints
Order_no	Varchar2(6)	Primary key/First letter start with 'O'
Order_date	Date	
Client_no	Varchar2(6)	Foreign Key references client_no of client_master table
Dely_addr	Varchar2(25)	
Salesman_no	Varchar2(6)	Foreign Key refrences sales_no of Salesman_master table
Dely_type	char	Delivery: part(P)/ full (f) Default 'F'
Order_status	Varchar2	In Process,Fulfilled,Backorder,Cancelled

SQL Statement:
CREATE TABLE SALES_ORDER(
ORDER_NO Varchar2(6) Primary key check(ORDER_NO like 'O%'),
ORDER_DATE Date,
CLIENT_NO Varchar2(6) references CLIENT_MASTER(CLIENT_NO),

DELY_ADDR Varchar2(25),
SALESMAN_NO Varchar2(6) references SALES_MASTER(SALESMAN_NO),
DELY_TYPE char default 'F' check(DELY_TYPE in ('f','p')),
DELY_DATE date,
ORDER_STATUS Varchar2(6) check(ORDER_STATUS
in('Process','Fulfilled','Backorder','Cancelled')),
check(dely_date>= Order_date)
);
DESC SALES_ORDER;

Output:

CONCLUSION: From this practical we learn how to apply integrity constraints while creating or altering table.