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| Programme | : | **M.Tech. (Integrated) Software Engineering** | Semester | : | **Fall 20-21** |
| Course | : | **Advanced Database Management Systems** | Code | : | **SWE2014** |
| Faculty | : | **Dr.Bhuvaneswari A** | Slot | : | **L27 + L28** |
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17MIS1056

**Exercise 10 : Sequence Generation**

Consider the following schema for customer-sale, where the primary keys are underlined.

* Customer (**Custid : Integer**, first\_name: VARCHAR2, last\_name: VARCHAR2, gender : char, email : VARCHAR2 NOT NULL, dob : DATE NOT NULL)
* Item(**Item\_id: Integer**, item\_name: VARCHAR2, price: integer)
* Sale(**bill\_No: Integer**, bill\_date: Date, **Custid : Integer, Item\_id: Integer**, qty\_sold: Integer)

1. First create tables with the primary Key constraints (Underlined attributes are primary keys )

ANS:

create table Customer(

Cust\_id integer Primary key,

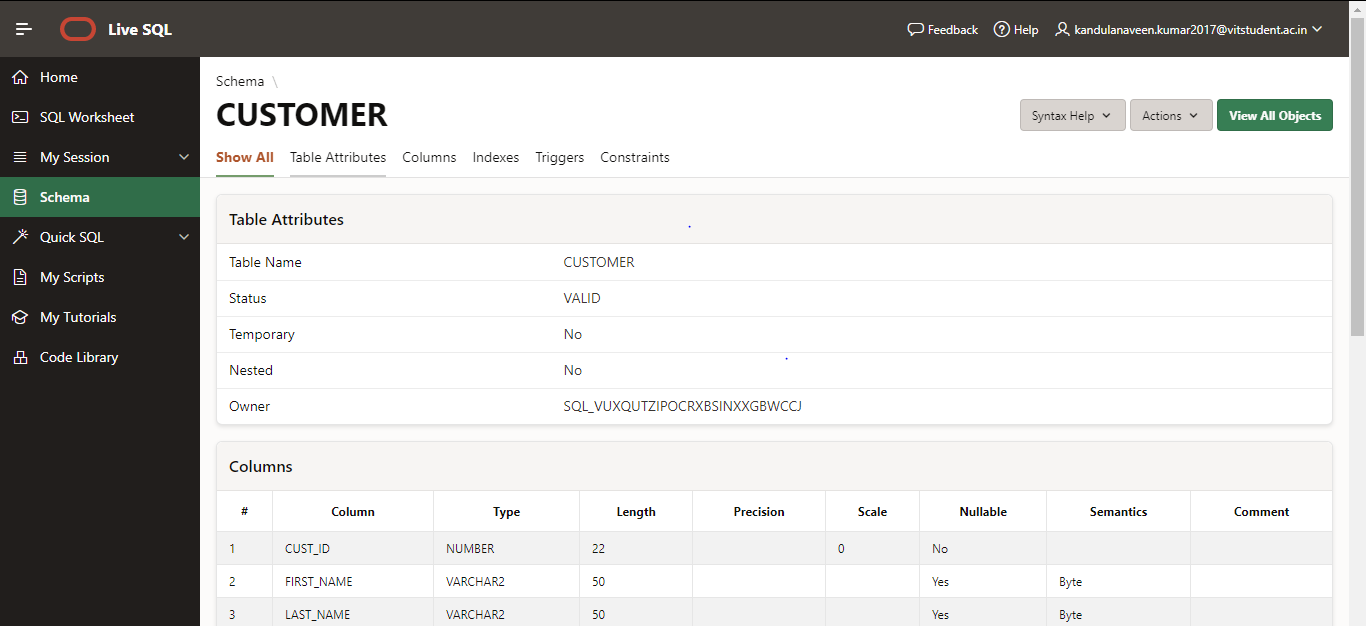
first\_name varchar2(50),

last\_name varchar2(50),

gender char(1),

email varchar2(20) not null,

DOB date not null);

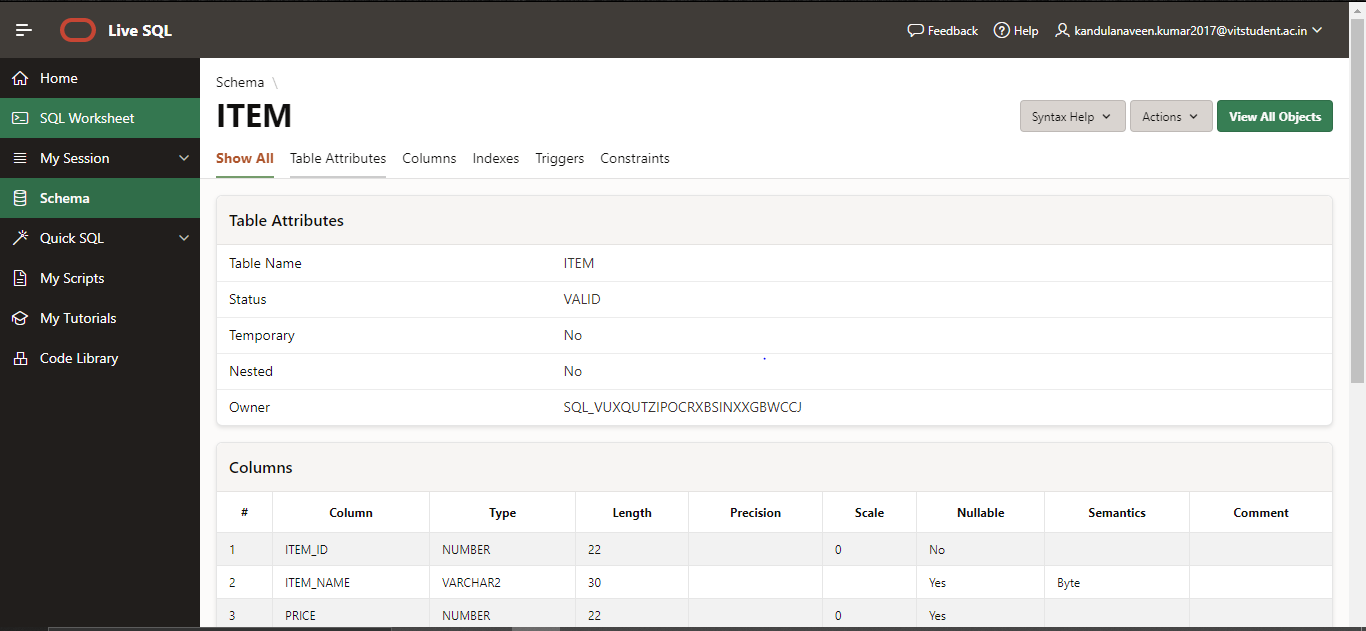


create table Item(

Item\_id integer primary key,

Item\_name varchar2(30),

price integer);



1. Add the Foreign Keys wherever it is applicable.

ANS:

create table Sale(

BillNo integer primary key,

BillDate date,

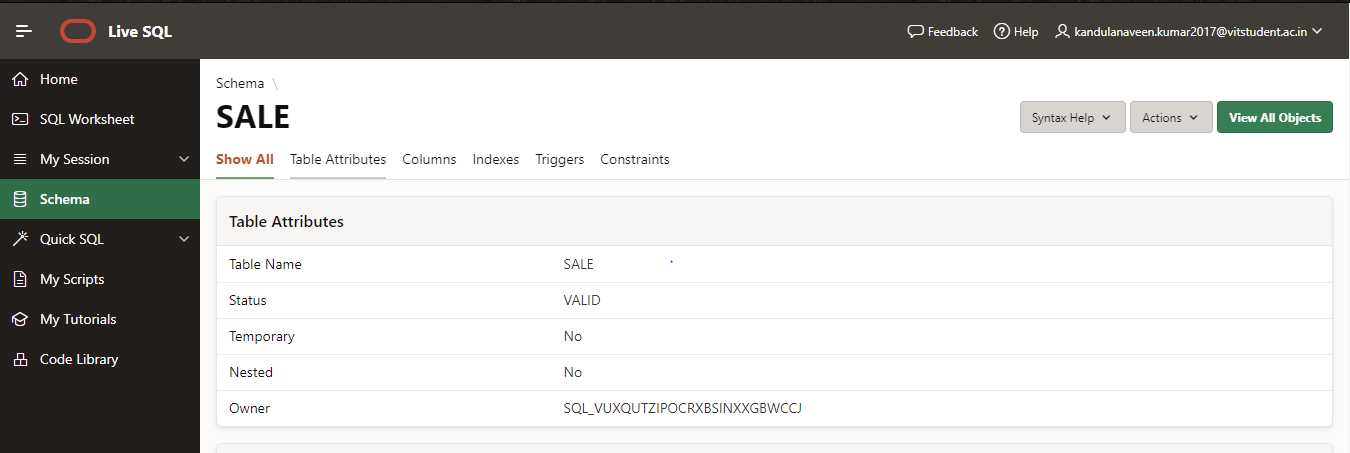
Cust\_id integer,

Item\_id integer,

quantity\_sold integer,

foreign key(Cust\_id) references Customer(Cust\_id),

foreign key(Item\_id) references Item(Item\_id));



1. Make Customer ID as sequence field start from 1(min) to NO MAX VALUE with auto increment value 1 with Cycle.

ANS:

create sequence Cust\_id

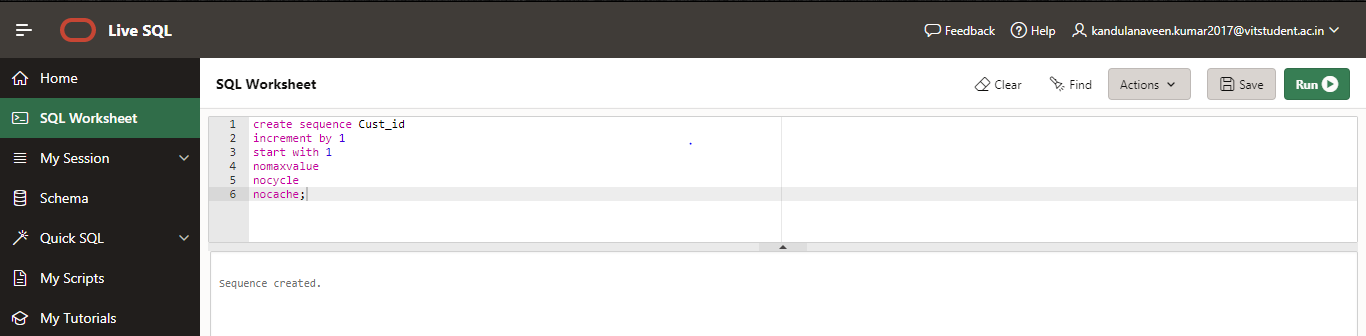
increment by 1

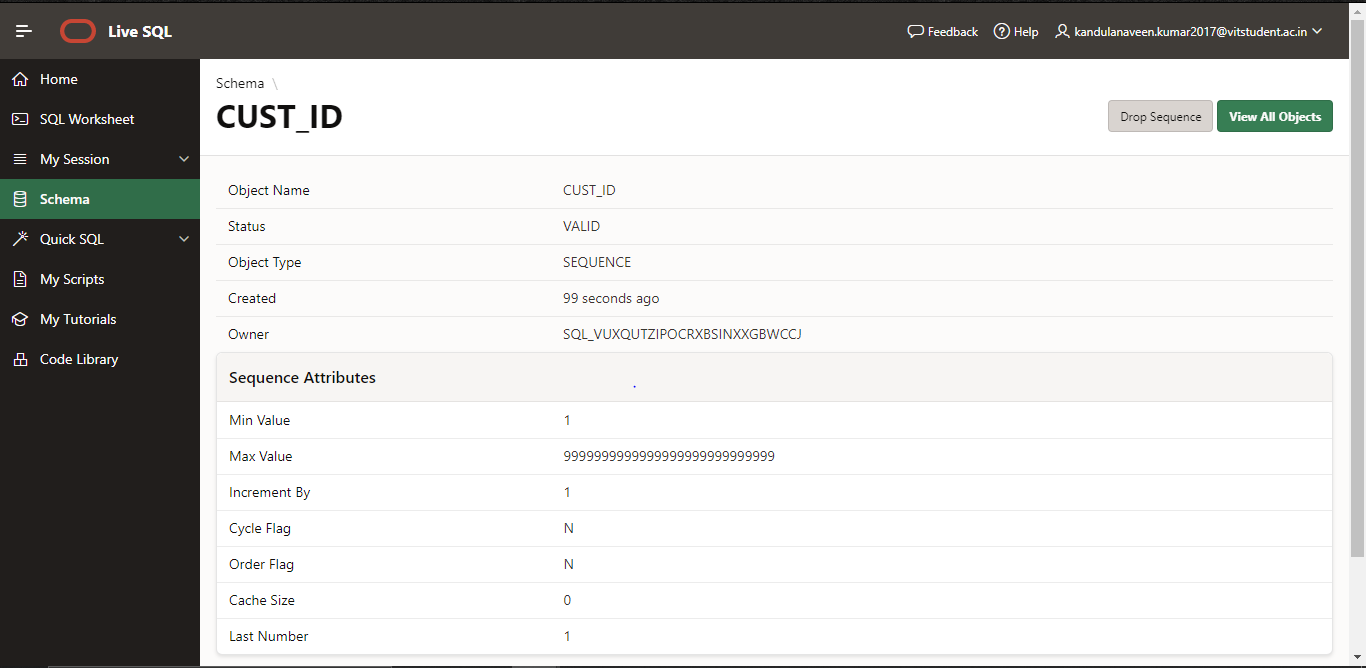
start with 1

nomaxvalue

nocycle

nocache;





1. Make Item ID as sequence field start from 1001(min) to 2000 (max) with auto increment value 5 with NO CYCLE

ANS:

create sequence Item\_id

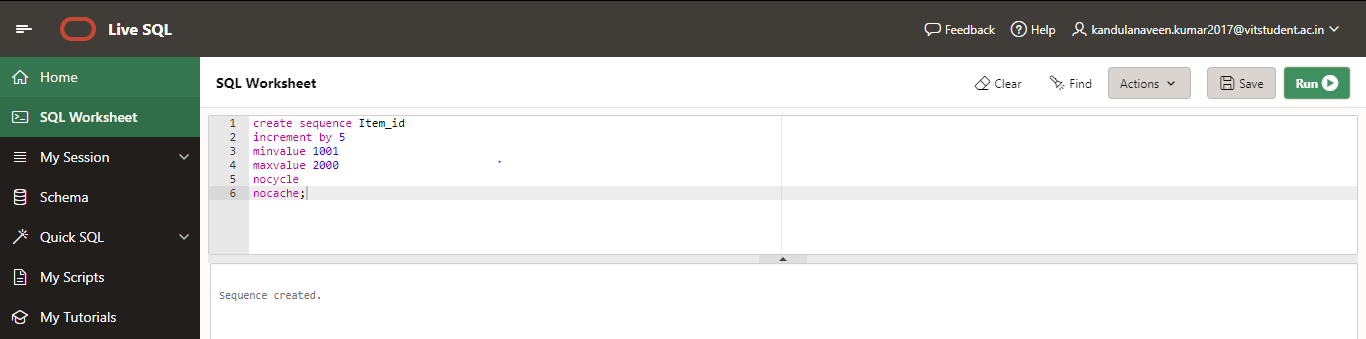
increment by 5

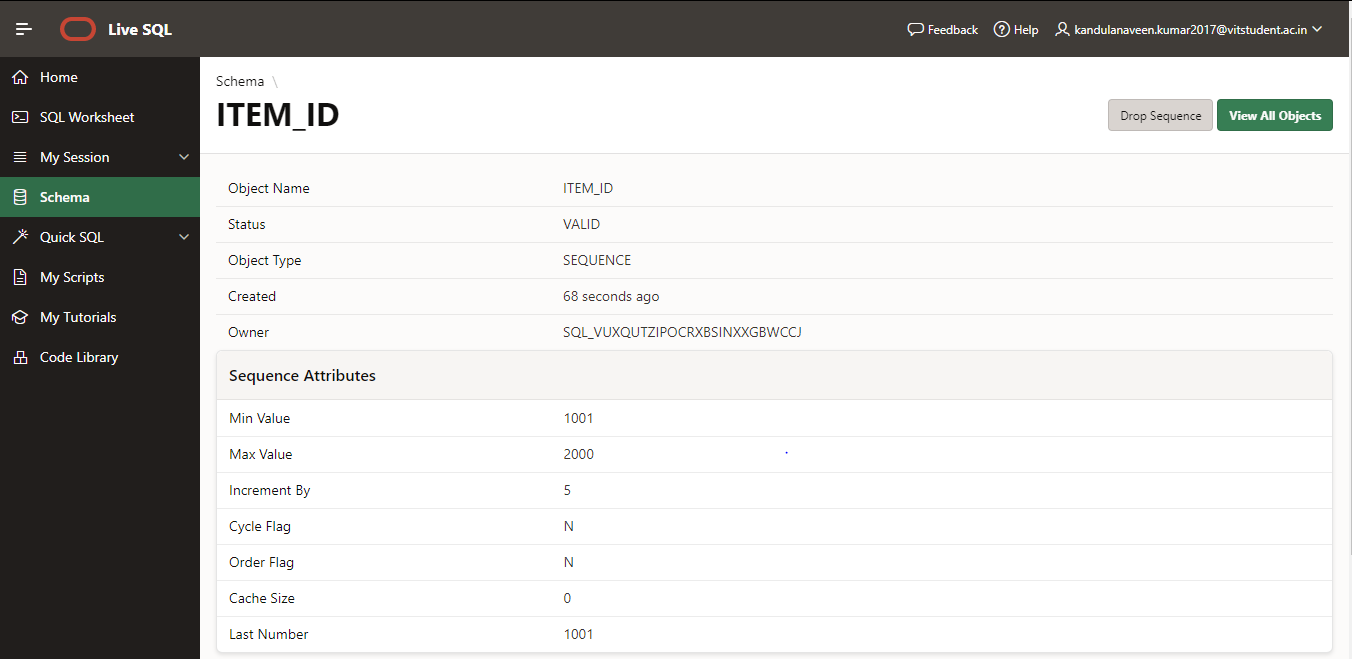
minvalue 1001

maxvalue 2000

nocycle

nocache;





1. Make Sales table Bill\_No as Sequence Field to generate bill number automatically from 2001 to NO MAX VALUE with auto increment 1.

ANS:

create sequence Sales\_Bill

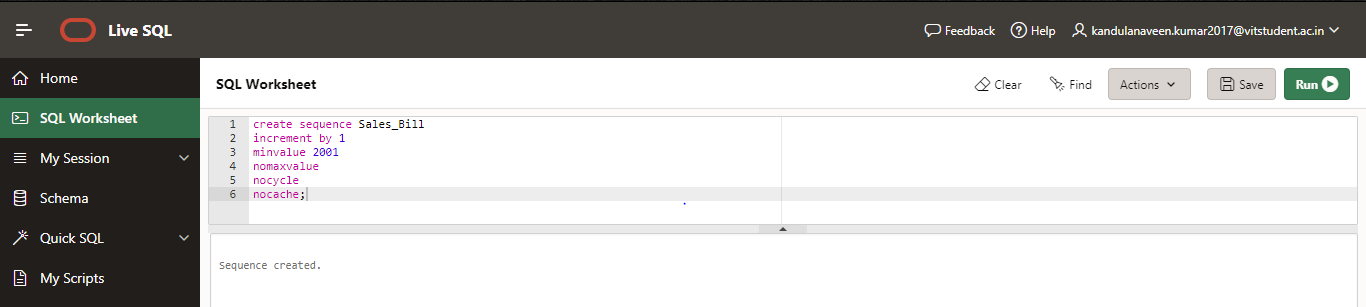
increment by 1

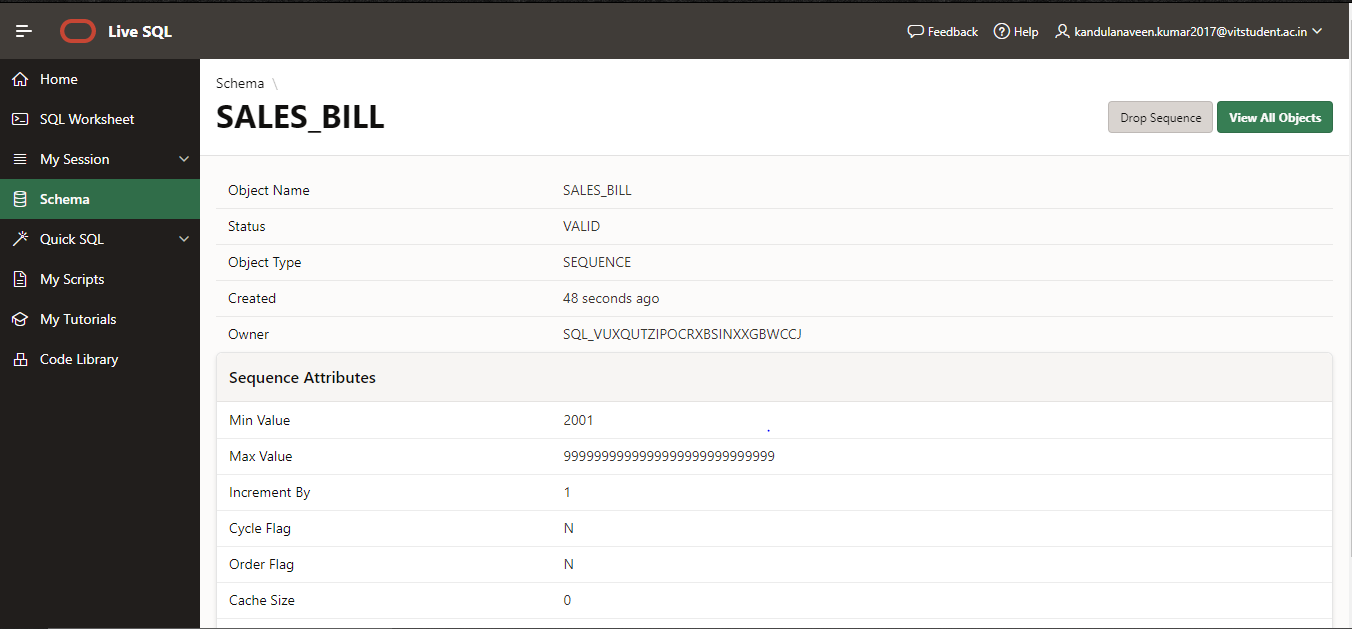
minvalue 2001

nomaxvalue

nocycle

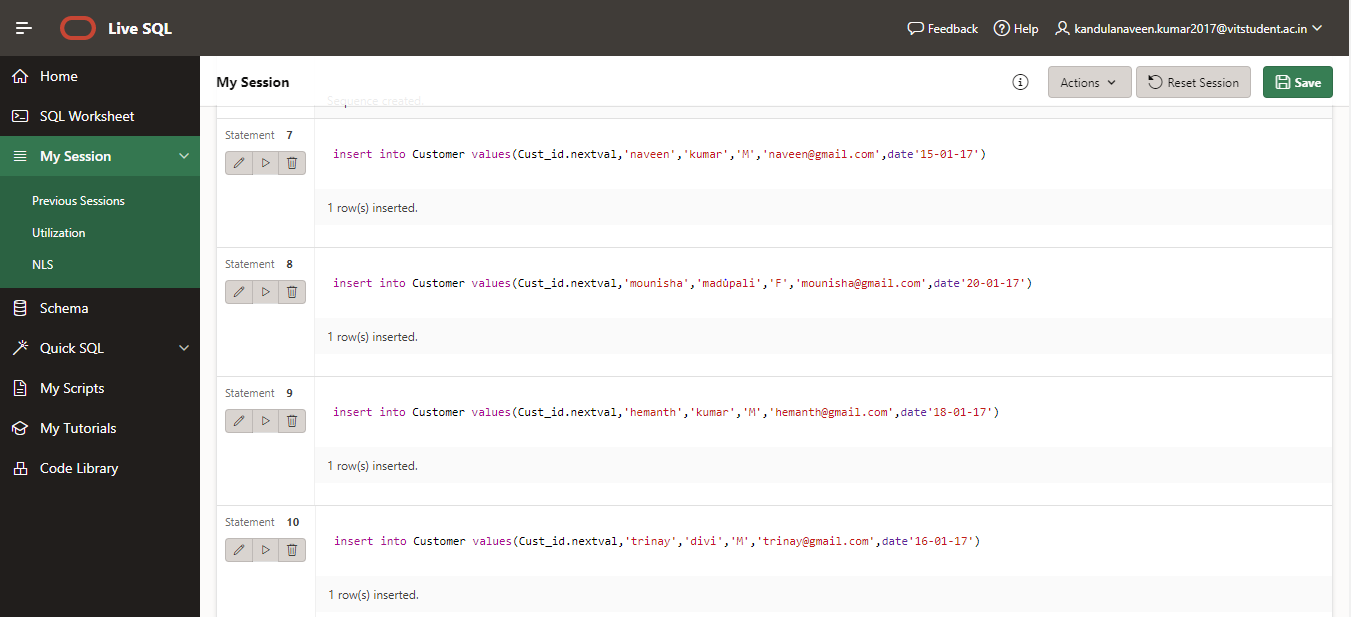
nocache;

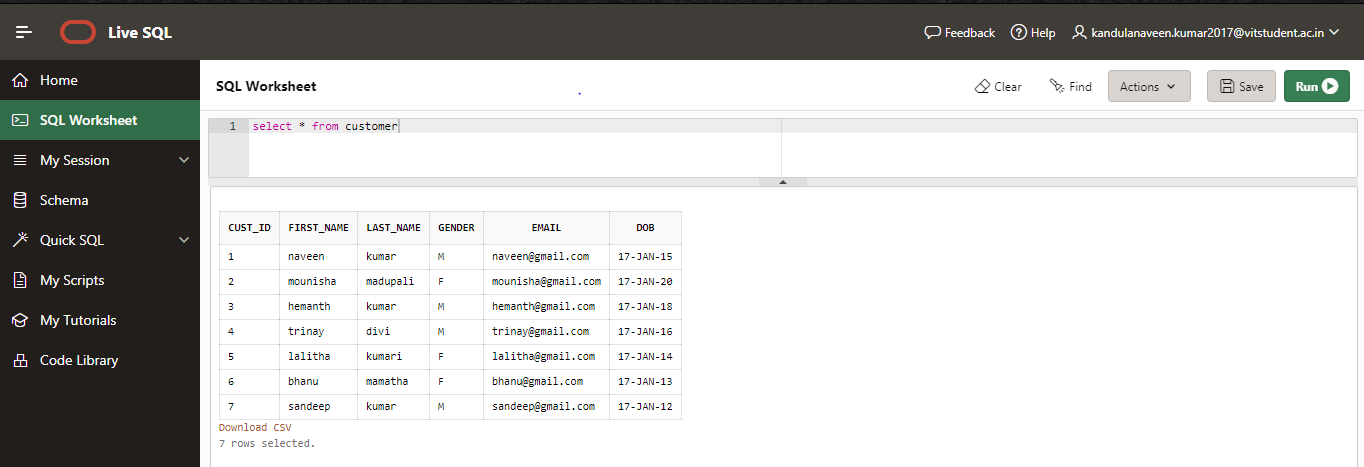




1. Insert values into the tables using sequence.nextval.
2. Perform a record insertion for the sales table using sequence.currval of customer.

Insert into Customer table :





Insert into Items table :

insert into Item values(Item\_id.nextval,'iphone','34566');

insert into Item values(Item\_id.nextval,'samsung','8664');

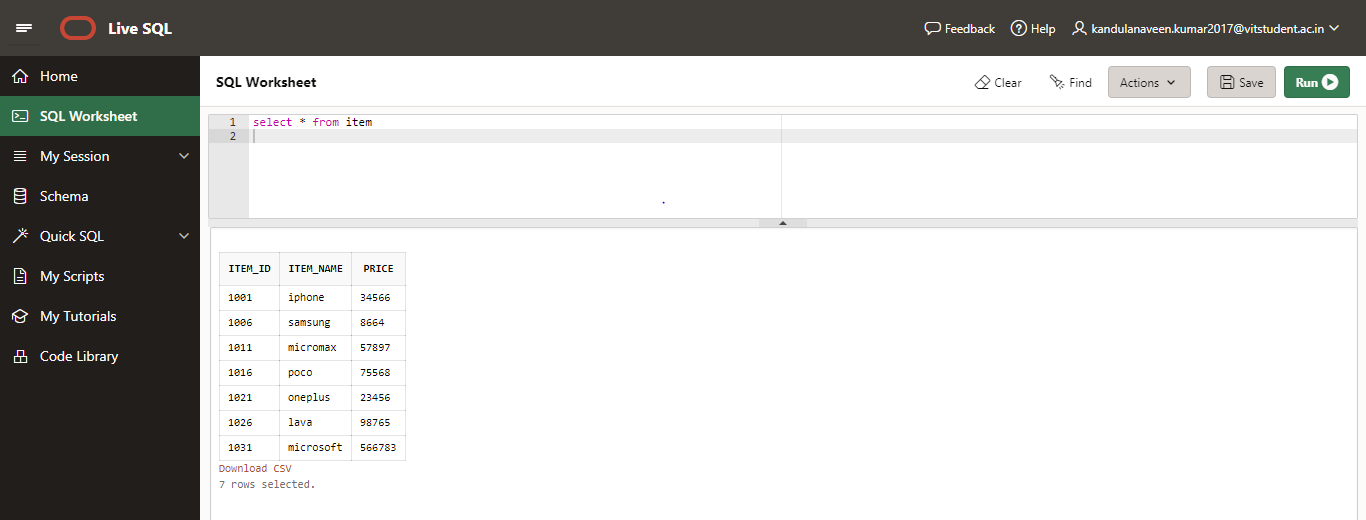
insert into Item values(Item\_id.nextval,'micromax','57897');

insert into Item values(Item\_id.nextval,'poco','75568');

insert into Item values(Item\_id.nextval,'oneplus','23456');

insert into Item values(Item\_id.nextval,'lava','98765');

insert into Item values(Item\_id.nextval,'microsoft','566783');



Insert into Sales table :

insert into Sale values(Sales\_Bill.nextval,date'12-01-17',Cust\_id.currval,Item\_id.currval,'20');

insert into Sale values(Sales\_Bill.nextval,date'13-01-17',Cust\_id.currval,Item\_id.currval,'30');

insert into Sale values(Sales\_Bill.nextval,date'14-01-17',Cust\_id.currval,Item\_id.currval,'40');

insert into Sale values(Sales\_Bill.nextval,date'15-01-17',Cust\_id.currval,Item\_id.currval,'50');

insert into Sale values(Sales\_Bill.nextval,date'16-01-17',Cust\_id.currval,Item\_id.currval,'60');

insert into Sale values(Sales\_Bill.nextval,date'17-01-17',Cust\_id.currval,Item\_id.currval,'70');

insert into Sale values(Sales\_Bill.nextval,date'18-01-17',Cust\_id.currval,Item\_id.currval,'80');

select \* from Sale;

