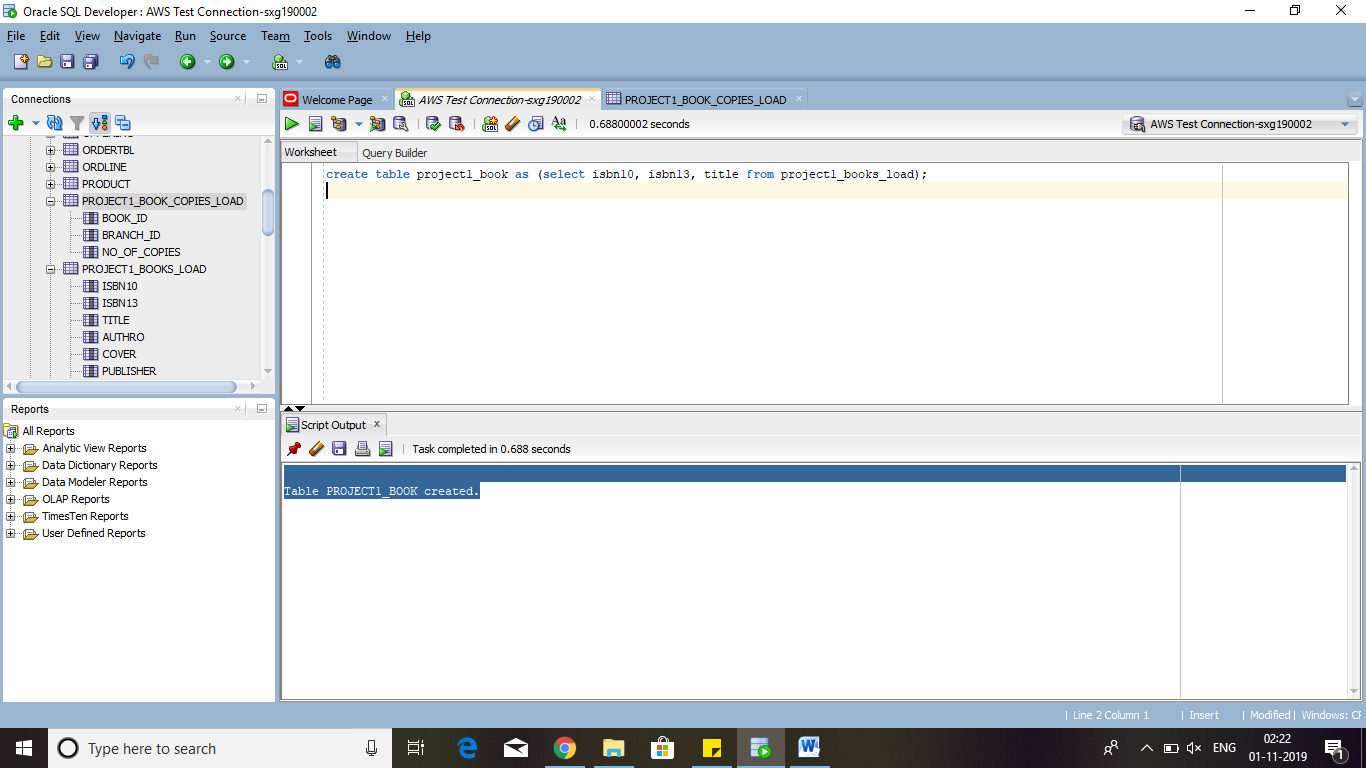
Create tables:

1.book:

CREATE TABLE PROJECT1\_BOOK AS (SELECT ISBN10, ISBN13, TITLE FROM PROJECT1\_BOOKS\_LOAD);

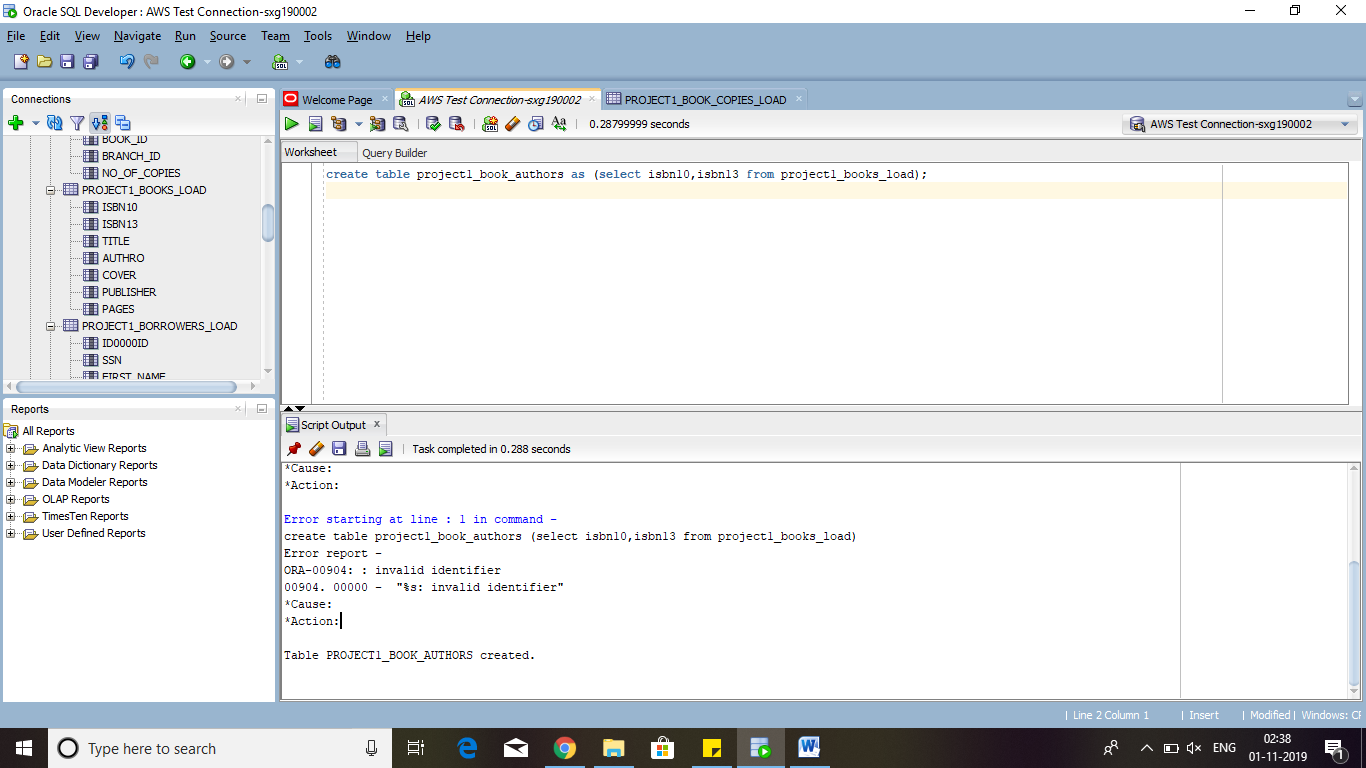
Table PROJECT1\_BOOK created.



2.book\_author

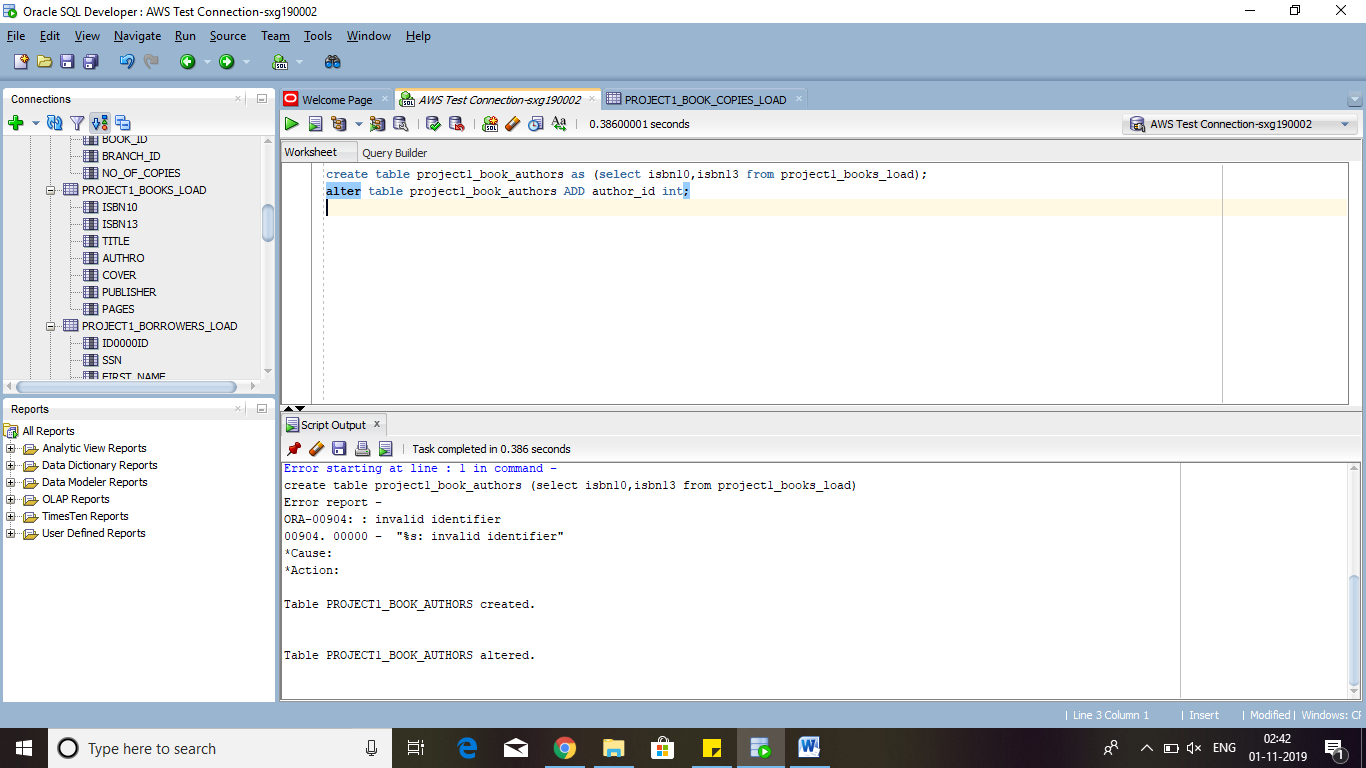
create table project1\_book\_authors as (select isbn10,isbn13 from project1\_books\_load);

Table PROJECT1\_BOOK\_AUTHORS created.



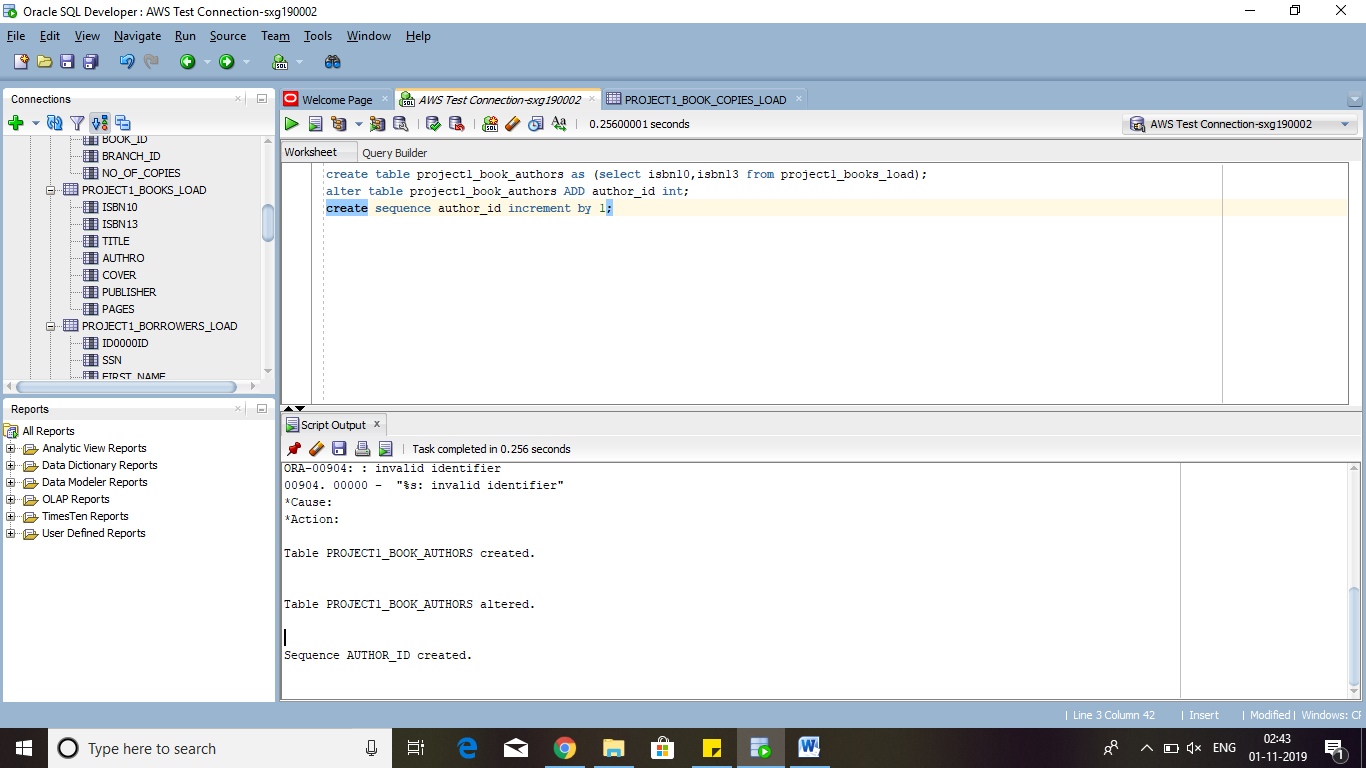
alter table project1\_book\_authors ADD author\_id int;

Table PROJECT1\_BOOK\_AUTHORS altered.



create sequence author\_id increment by 1;

Sequence AUTHOR\_ID created.



update project1\_book\_authors set author\_id = author\_id.nextval;

25,000 rows updated.

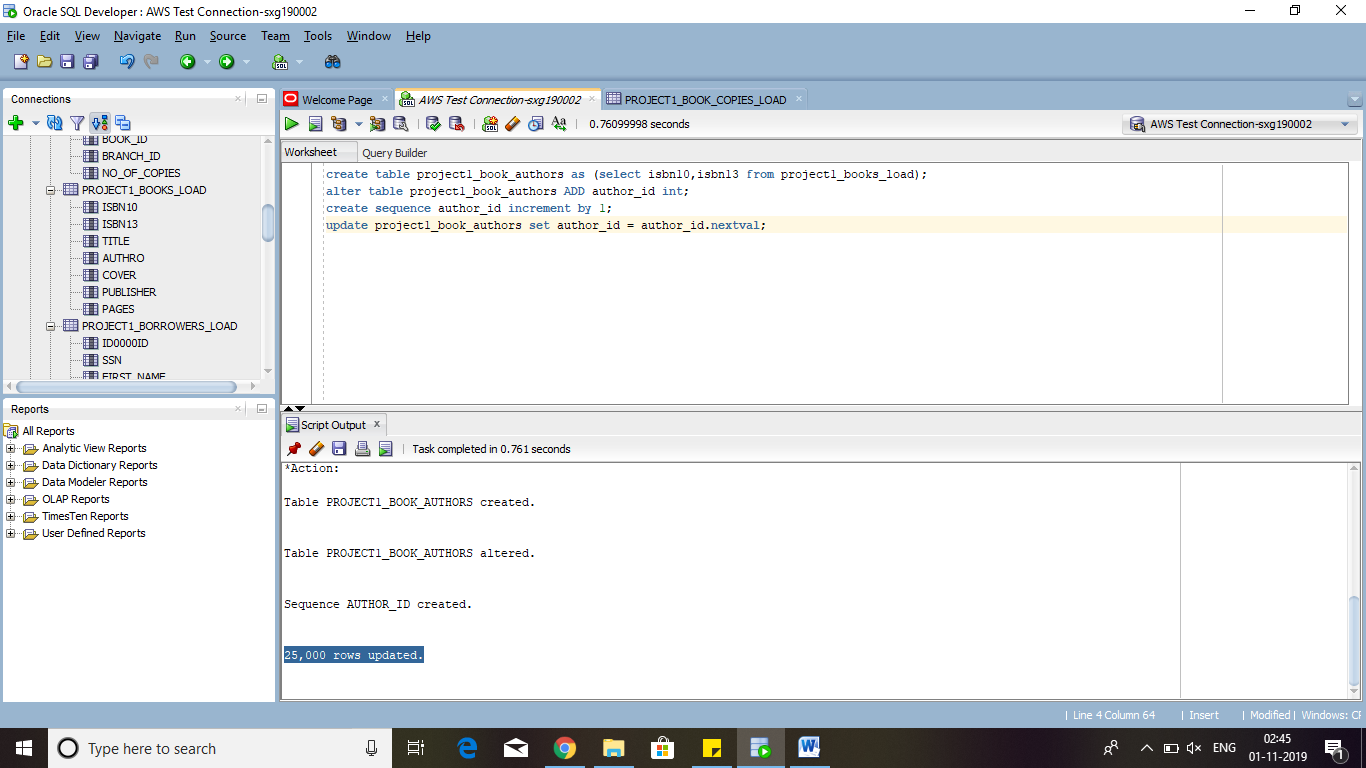
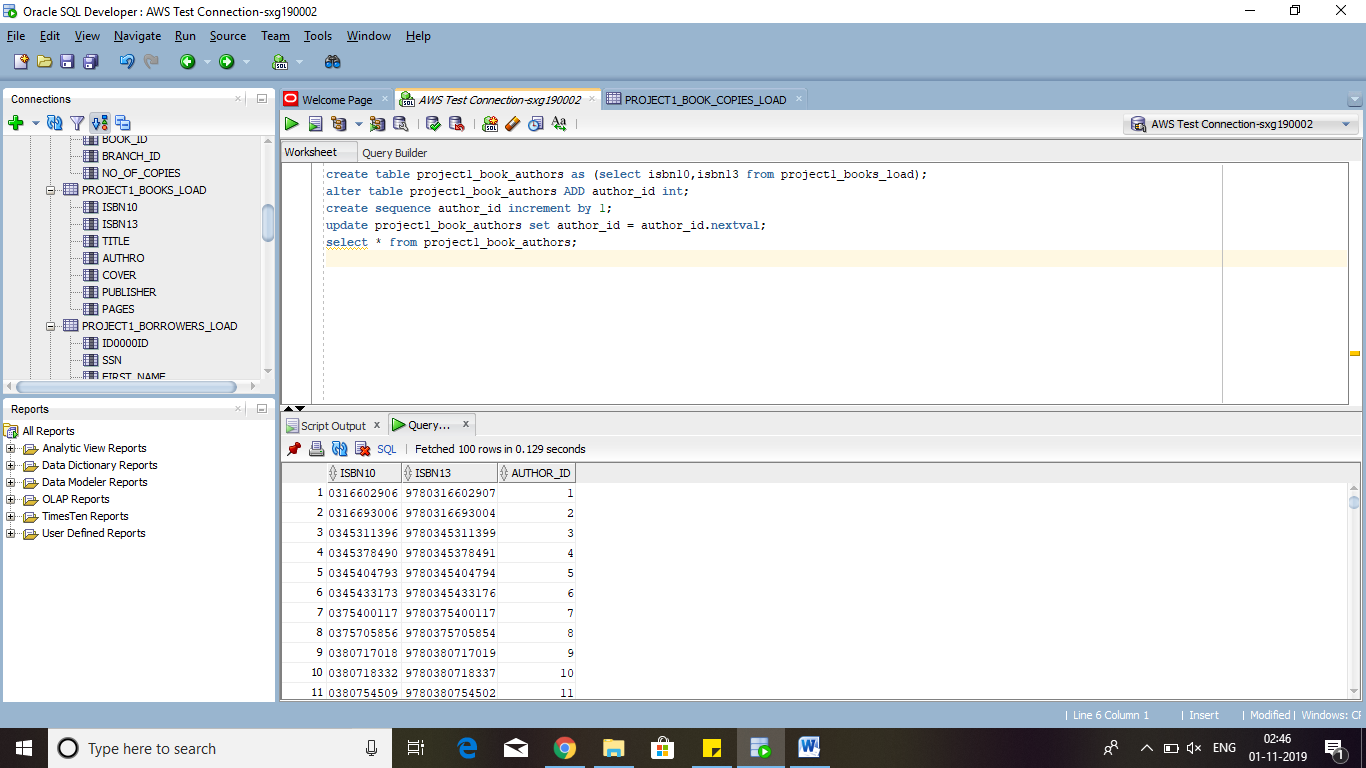


Table created: project1\_book\_authors



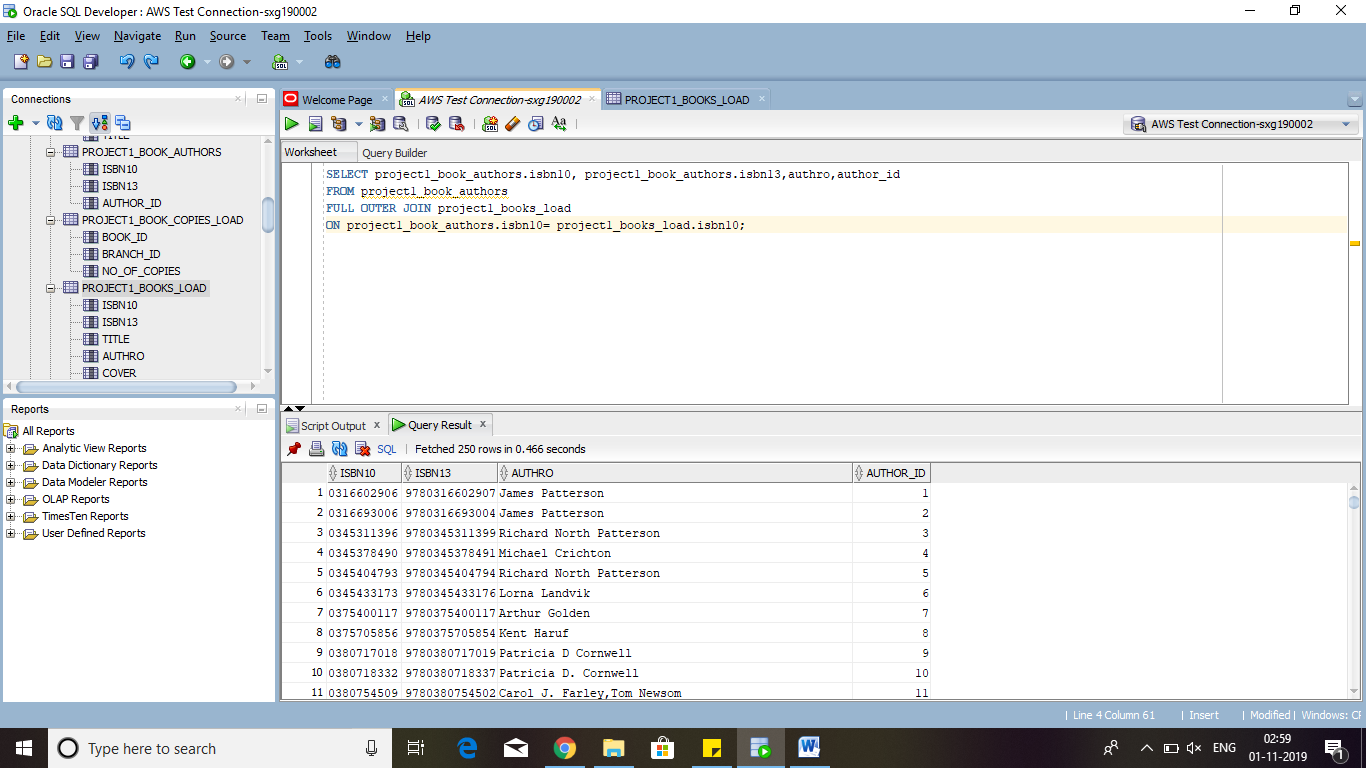
3. authors:

SELECT project1\_book\_authors.isbn10, project1\_book\_authors.isbn13,authro,author\_id

FROM project1\_book\_authors

FULL OUTER JOIN project1\_books\_load

ON project1\_book\_authors.isbn10= project1\_books\_load.isbn10;



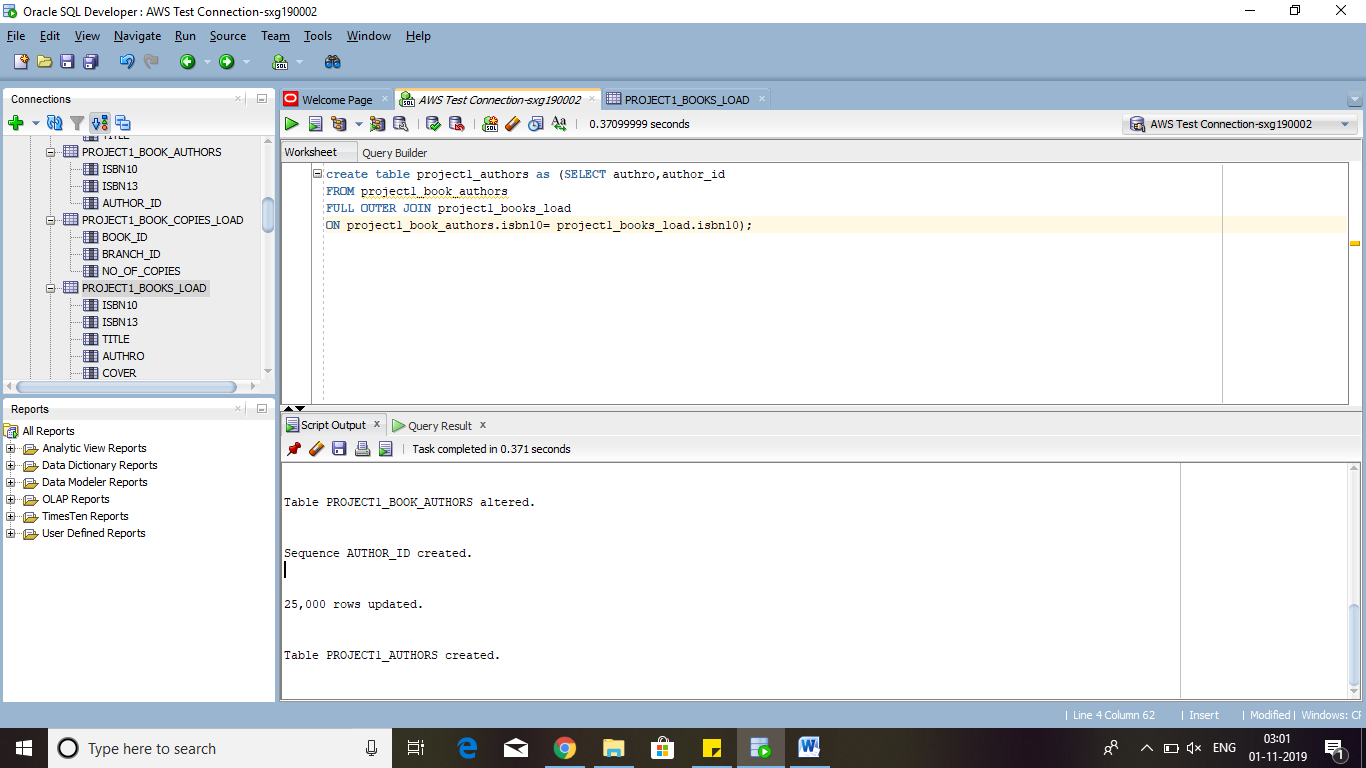
create table project1\_authors as (SELECT authro,author\_id

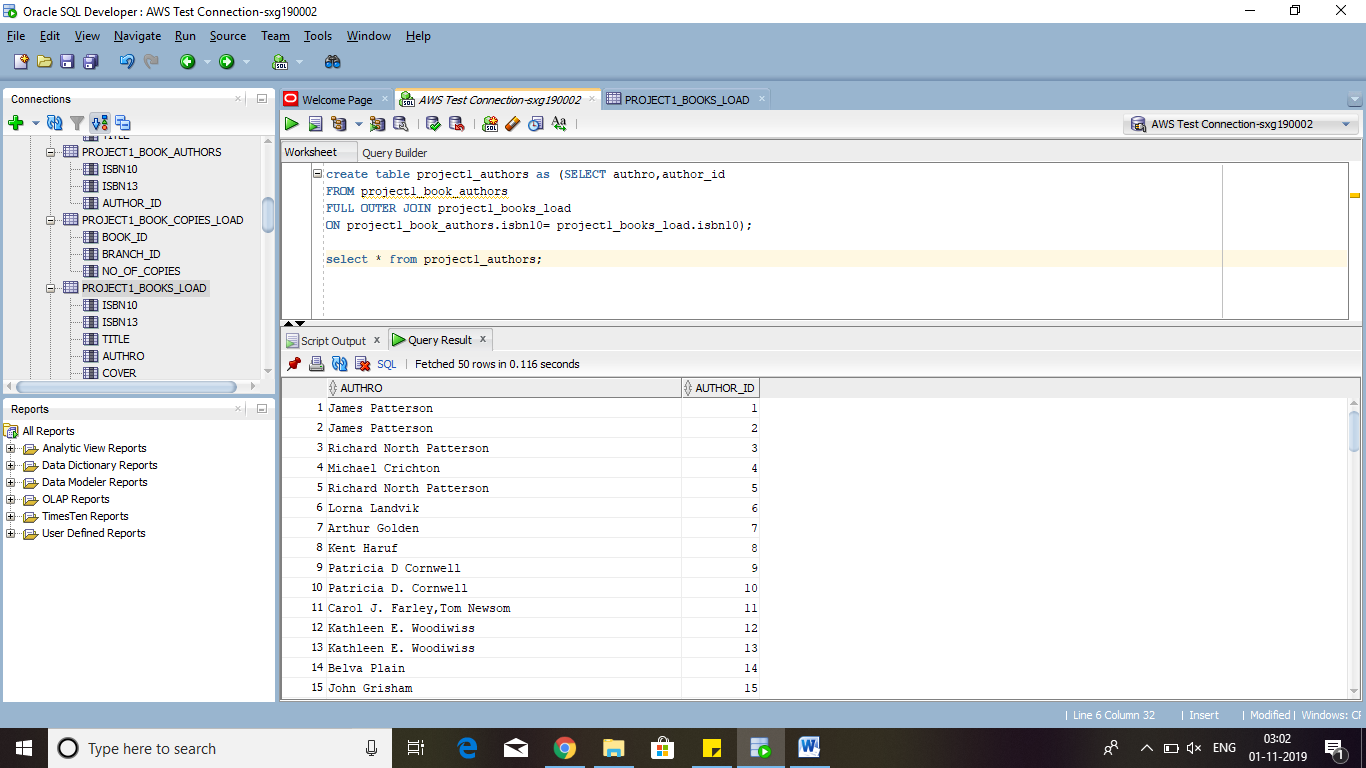
FROM project1\_book\_authors

FULL OUTER JOIN project1\_books\_load

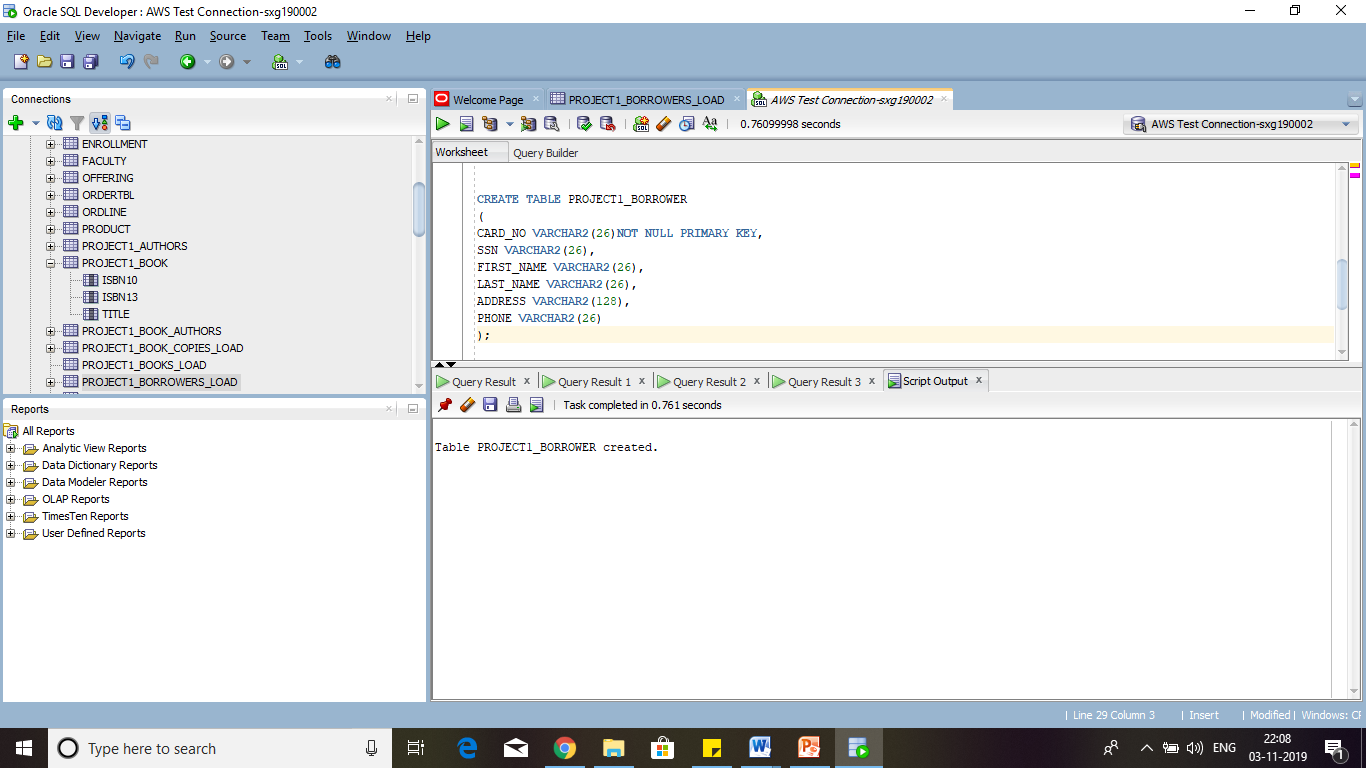
ON project1\_book\_authors.isbn10= project1\_books\_load.isbn10);

Table PROJECT1\_AUTHORS created.





BORROWER



CREATE TABLE PROJECT1\_BORROWER

(

CARD\_NO VARCHAR2(26)NOT NULL PRIMARY KEY,

SSN VARCHAR2(26),

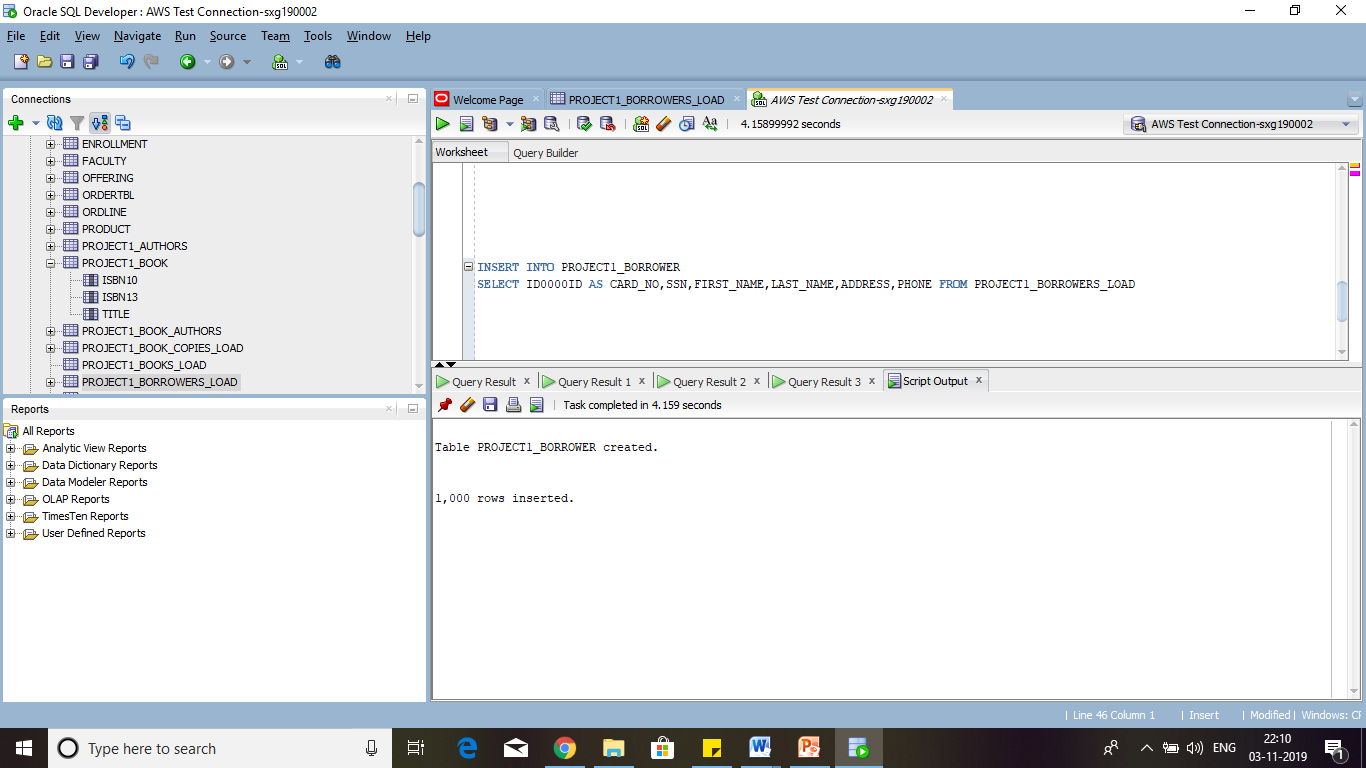
FIRST\_NAME VARCHAR2(26),

LAST\_NAME VARCHAR2(26),

ADDRESS VARCHAR2(128),

PHONE VARCHAR2(26)

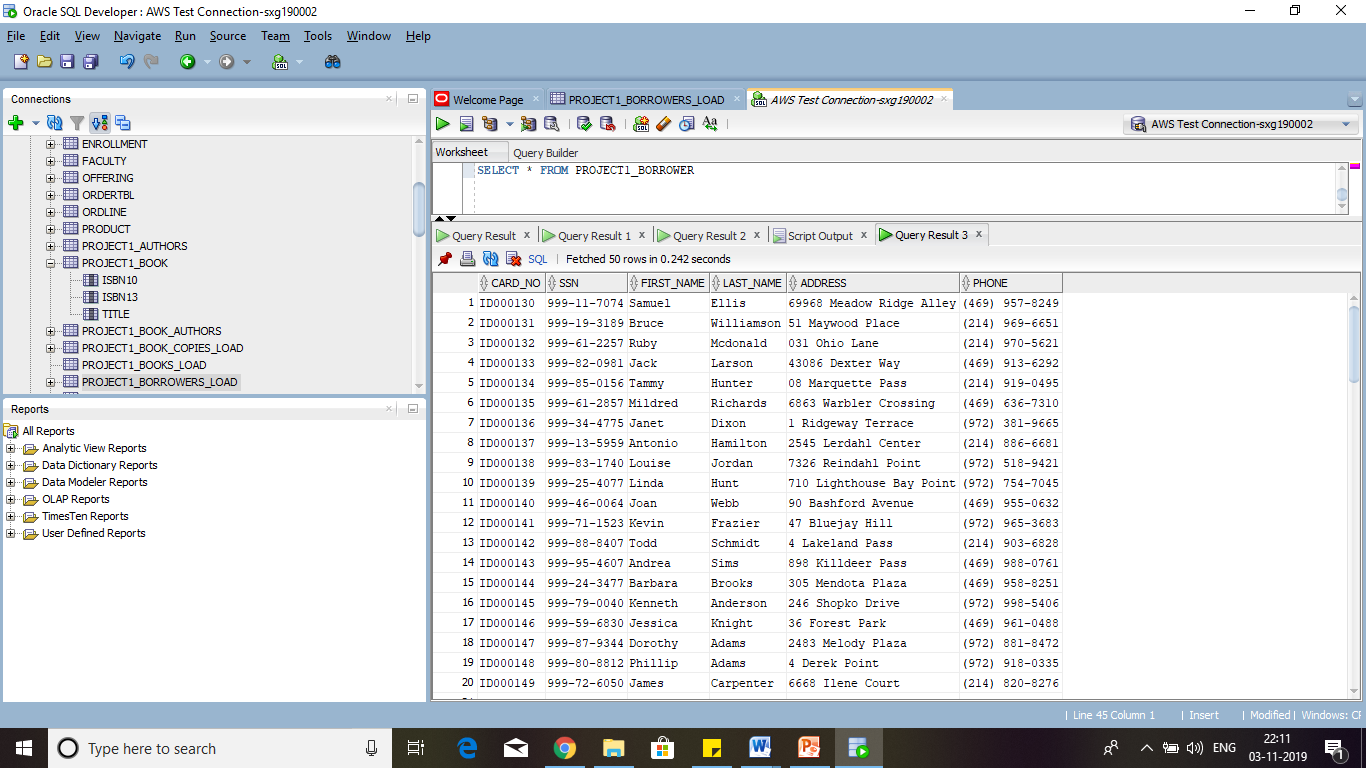
);



--INSERT INTO BORROWERS--

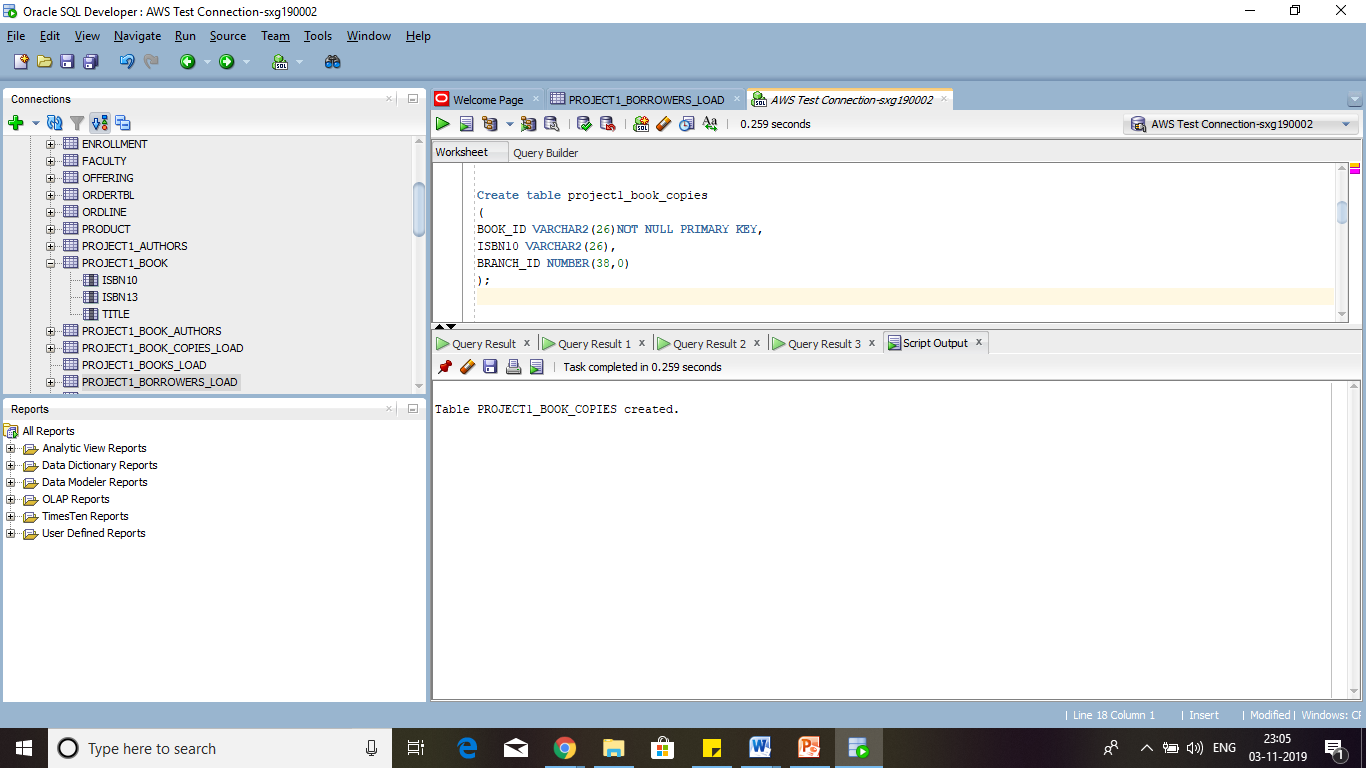
INSERT INTO PROJECT1\_BORROWER

SELECT ID0000ID AS CARD\_NO,SSN,FIRST\_NAME,LAST\_NAME,ADDRESS,PHONE FROM PROJECT1\_BORROWERS\_LOAD



--PROJECT1\_BORROWER--

SELECT \* FROM PROJECT1\_BORROWER



BOOK\_COPIES

Create table project1\_book\_copies

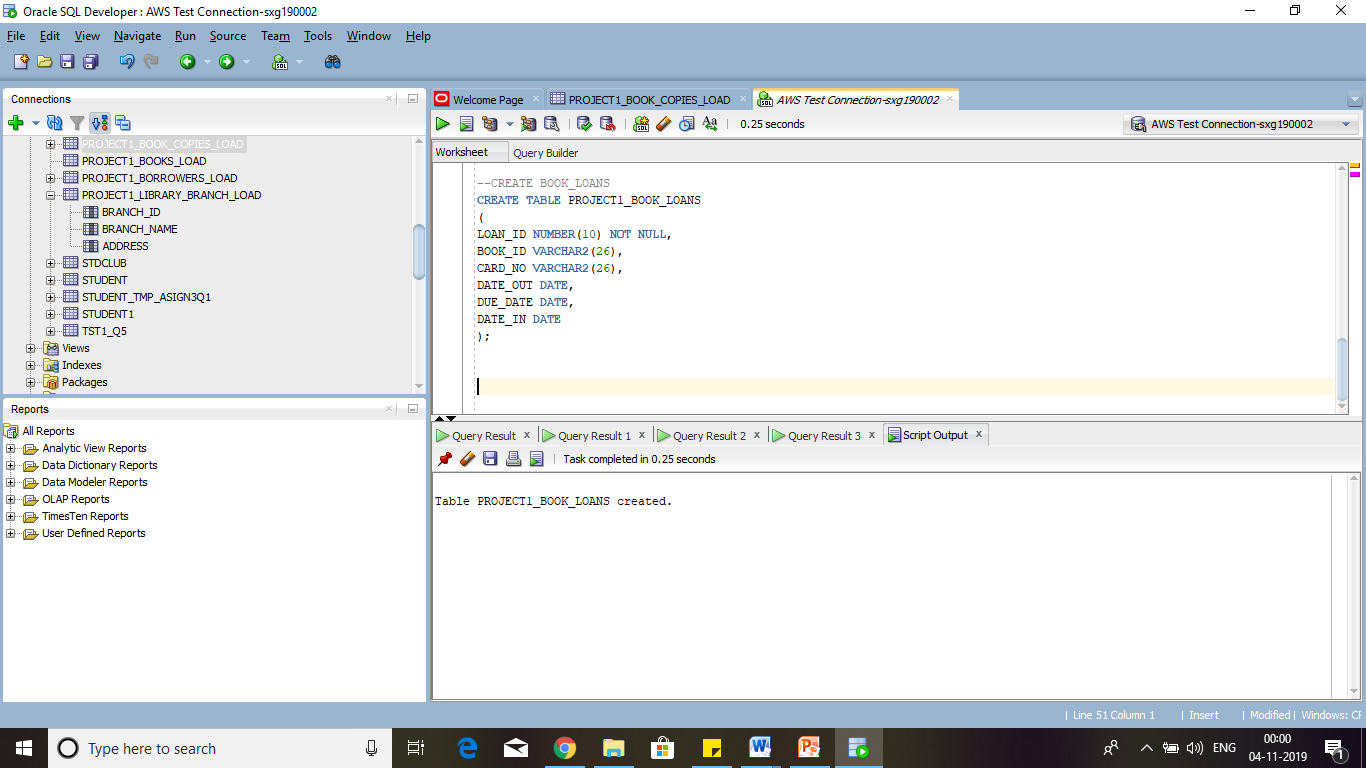
(

BOOK\_ID VARCHAR2(26)NOT NULL PRIMARY KEY,

ISBN10 VARCHAR2(26),

BRANCH\_ID NUMBER(38,0)

);



--CREATE BOOK\_LOANS

CREATE TABLE PROJECT1\_BOOK\_LOANS

(

LOAN\_ID NUMBER(10) NOT NULL,

BOOK\_ID VARCHAR2(26),

CARD\_NO VARCHAR2(26),

DATE\_OUT DATE,

DUE\_DATE DATE,

DATE\_IN DATE

);

DECLARE

BOOK\_ID NUMBER;

CARD\_NO VARCHAR2(26);

DATE\_OUT DATE;

DUE\_DATE DATE;

DATE\_IN DATE;

DATE\_TEMP NUMBER;

BEGIN

for i in 1..750 loop

SELECT BOOK\_ID INTO BOOK\_ID FROM

(SELECT BOOK\_ID FROM PROJECT1\_BOOK\_COPIES --WHERE NO\_OF\_COPIES <>0

ORDER BY DBMS\_RANDOM.VALUE)

WHERE ROWNUM=1;

SELECT CARD\_NO INTO CARD\_NO FROM

(SELECT CARD\_NO FROM PROJECT1\_BORROWER

ORDER BY DBMS\_RANDOM.VALUE)

WHERE ROWNUM=1;

select (to\_date(TRUNC(DBMS\_RANDOM.VALUE(2458485,2458849)),'J'))

INTO DATE\_OUT

from dual;

due\_date := date\_out + 8;

date\_TEMP := to\_number(to\_char(date\_out,'j'));

select (to\_date(trunc(dbms\_random.value(date\_TEMP,date\_TEMP+15)),'J')) into date\_in from dual;

insert into PROJECT1\_BOOK\_LOANS(LOAN\_ID,CARD\_NO,BOOK\_ID,DATE\_OUT,DUE\_DATE,DATE\_IN)

values (LOAN\_ID.nextval,CARD\_NO,BOOK\_ID,DATE\_OUT,DUE\_DATE,DATE\_IN);

END LOOP;

COMMIT;

END;

------------------------------------------------------------------------------------------

Create table project1\_FINES

(

LOAN\_ID NUMBER(38,0)NOT NULL,

FINE\_AMT NUMBER(38,0),

PAID VARCHAR2(20)

);

INSERT INTO project1\_FINES

SELECT

LOAN\_ID,

DATE\_IN - DUE\_DATE,

'Yes'

FROM

PROJECT1\_BOOK\_LOANS

WHERE

DUE\_DATE < DATE\_IN

update PROJECT1\_FINES set pAID = 'No' WHERE Loan\_Id <= 550

select \* from project1\_FINES order by lOAN\_Id

