

**ISM 6217 – Database Management Systems**

**Fall 2017**

**Class Assignment 5**

**5 points**

**Task: Adding Constraints and Table rows insertion**

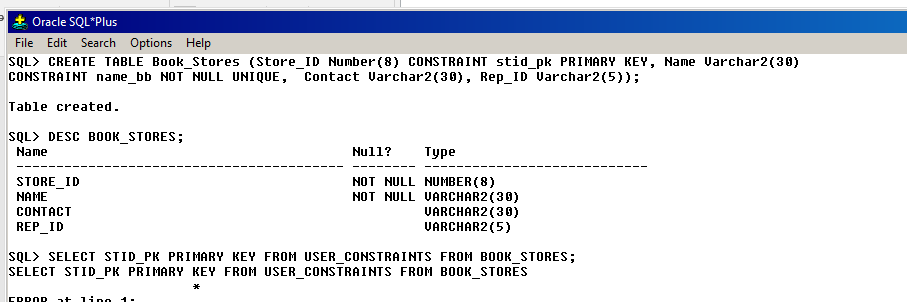
1. Complete the hands-on exercises 5, 6, 7 and 8 from Chapter 4,page 138 of the textbook. Paste the SQL and results. Verify the constraints by querying the user\_constraints table and paste screen shot of those results. (3 points)

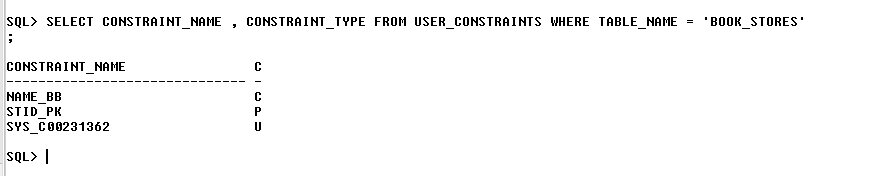
**Answer to Question 5**

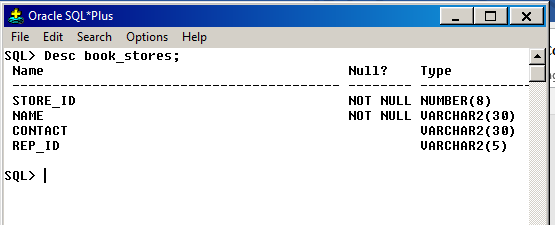
CREATE TABLE Book\_Stores (Store\_ID Number(8) CONSTRAINT stid\_pk PRIMARY KEY, Name Varchar2(30) CONSTRAINT name\_bb NOT NULL UNIQUE, Contact Varchar2(30), Rep\_ID Varchar2(5));

SELECT CONSTRAINT\_NAME , CONSTRAINT\_TYPE FROM USER\_CONSTRAINTS WHERE TABLE\_NAME = ‘BOOK\_STORES’;

Desc book\_stores;



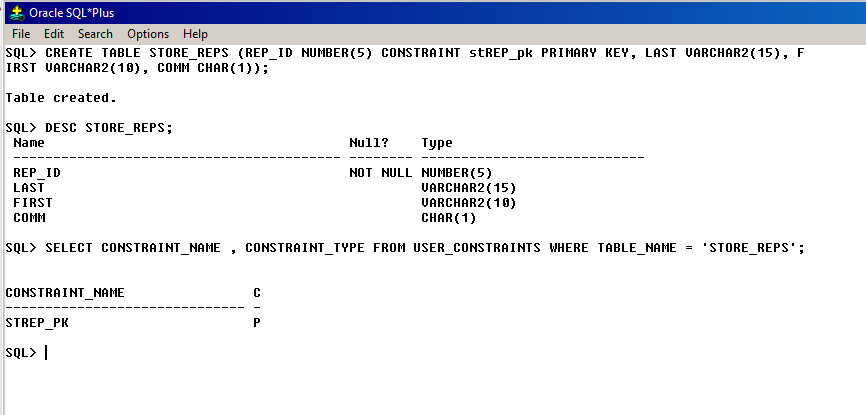




**QUESTION 1 - CREATING STORE\_REPS TABLE (NEEDED TO ANS QUESTION 6)**

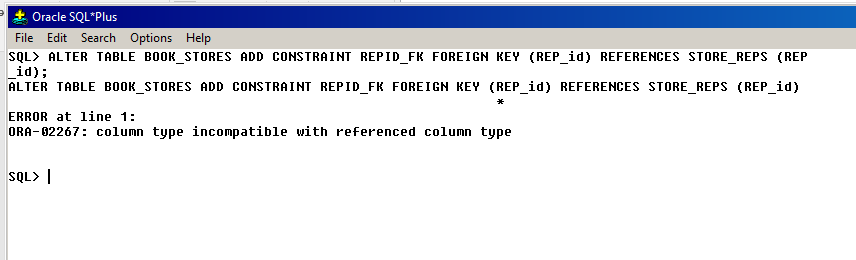
CREATE TABLE STORE\_REPS (REP\_ID NUMBER(5) CONSTRAINT stREP\_pk PRIMARY KEY, LAST VARCHAR2(15), FIRST VARCHAR2(10), COMM CHAR(1));

SELECT CONSTRAINT\_NAME , CONSTRAINT\_TYPE FROM USER\_CONSTRAINTS WHERE TABLE\_NAME = ‘STORE\_REPS’;



**Answer to Question 6**

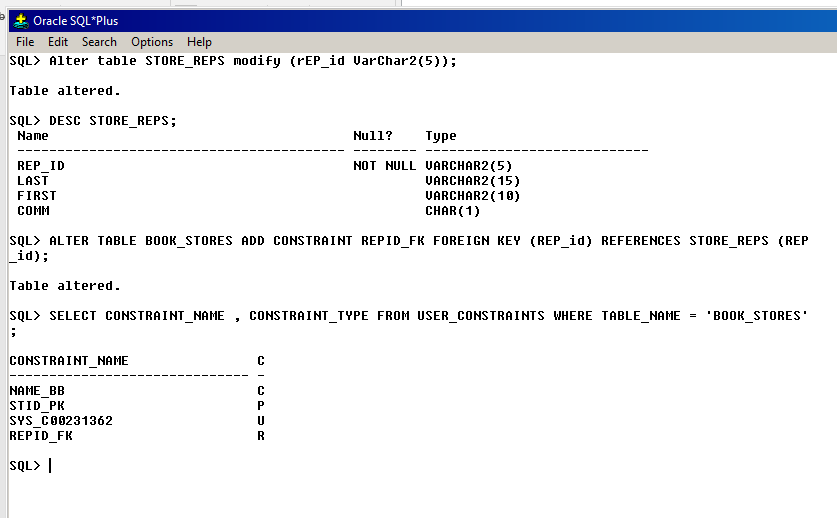
ALTER TABLE BOOK\_STORES ADD CONSTRAINT REPID\_FK FOREIGN KEY (REP\_id) REFERENCES STORE\_REPS (REP\_id);



YES, ERROR CAUSED WHEN ADDING CONSTRAINT

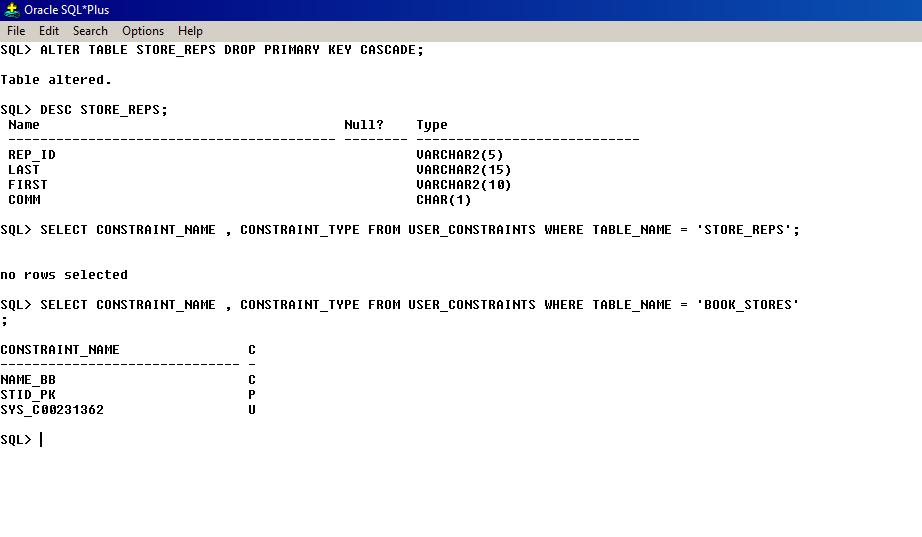
MODIFICATION – ALTERED STORE\_REPS REP\_id CHARACTER TYPE TO THAT OF BOOK\_STORES – VARCHAR2(5) because varchar data type takes alphanumeric.

Alter table STORE\_REPS modify (rEP\_id VarChar2(5)); --- > no ERROR THEN



**Answer to Question 7**

ALTER TABLE STORE\_REPS DROP PRIMARY KEY CASCADE;

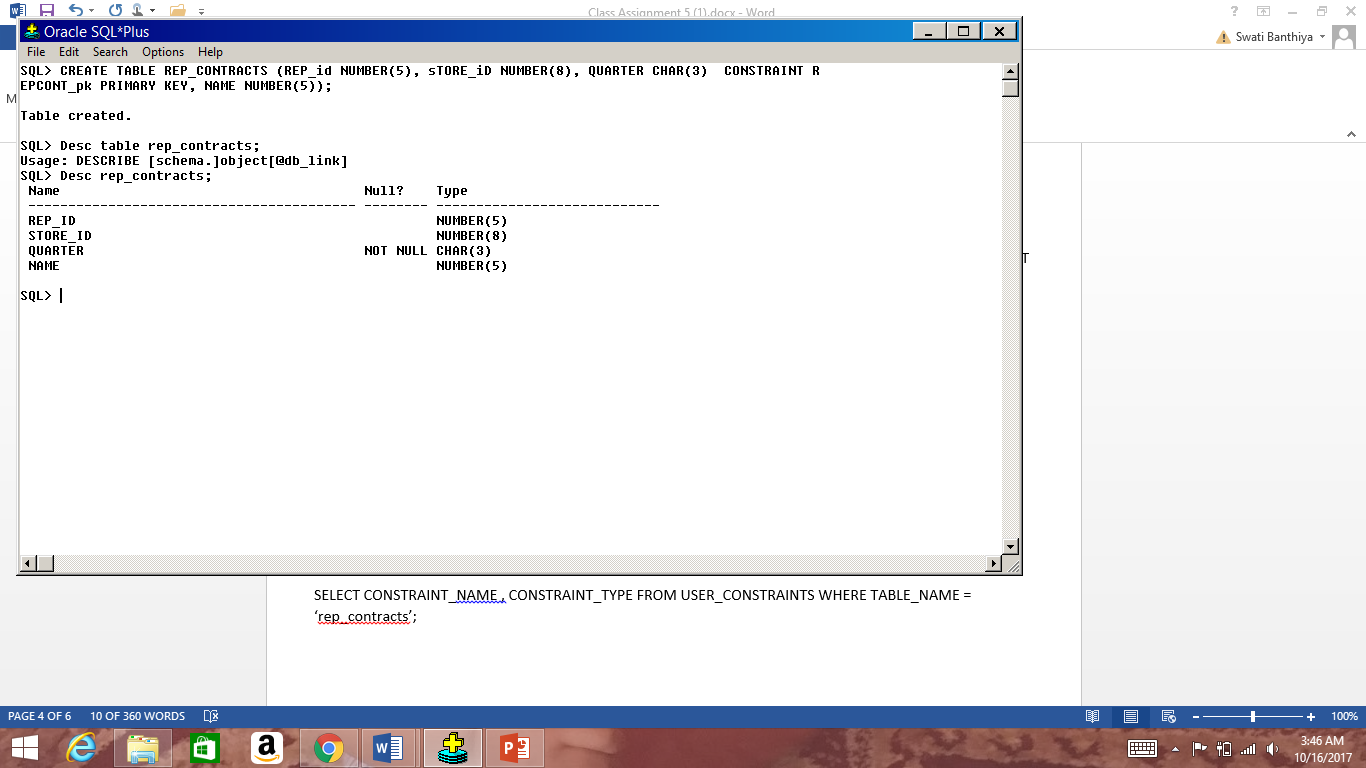


**Answer to Question 8**

STEP 1- CREATING TABLE AND ADDING PRIMARY KEY

CREATE TABLE REP\_CONTRACTS (REP\_id NUMBER(5), sTORE\_iD NUMBER(8), QUARTER CHAR(3) CONSTRAINT REPCONT\_pk PRIMARY KEY, NAME NUMBER(5));

Desc rep\_contracts;



sTEP 2- ADDING FOREIGN KEY STORE\_id AND REP\_id

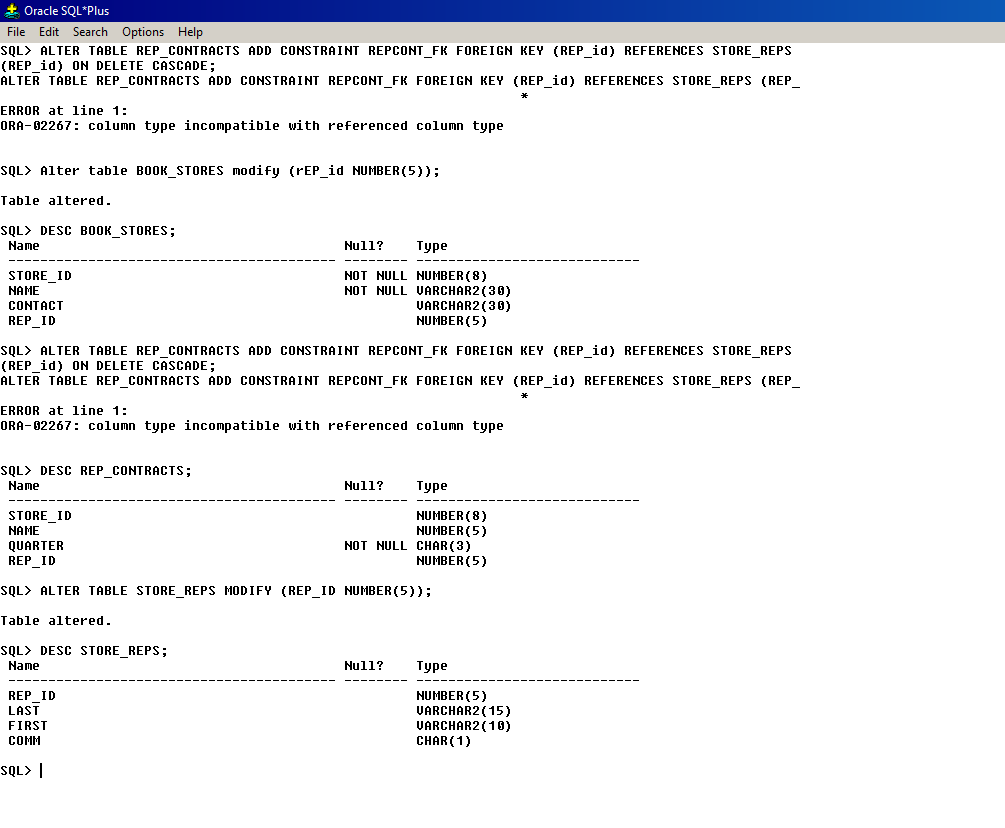
(FOR WHICH ALTERATION TO CHARACTER TYPE IN REP\_id IN STORE\_REPS IS REQUIRED- TO NUMBER(5) & ALTER TABLE STORE\_REPS ADD CONSTRAINT STREP\_PK PRIMARY KEY (REP\_id); - PRIMARY KEY WAS DELETED IN QUES 7)

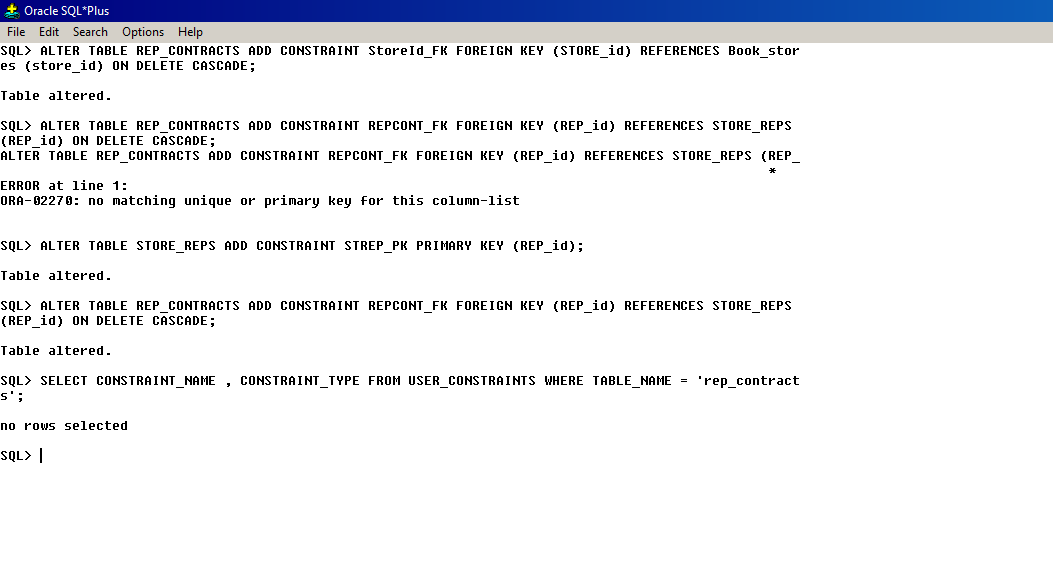
Alter table STORE\_REPS modify (rEP\_id NUMBER(5)); (WAS CHANGED TO VARCHAR2(5) IN QUE.6)

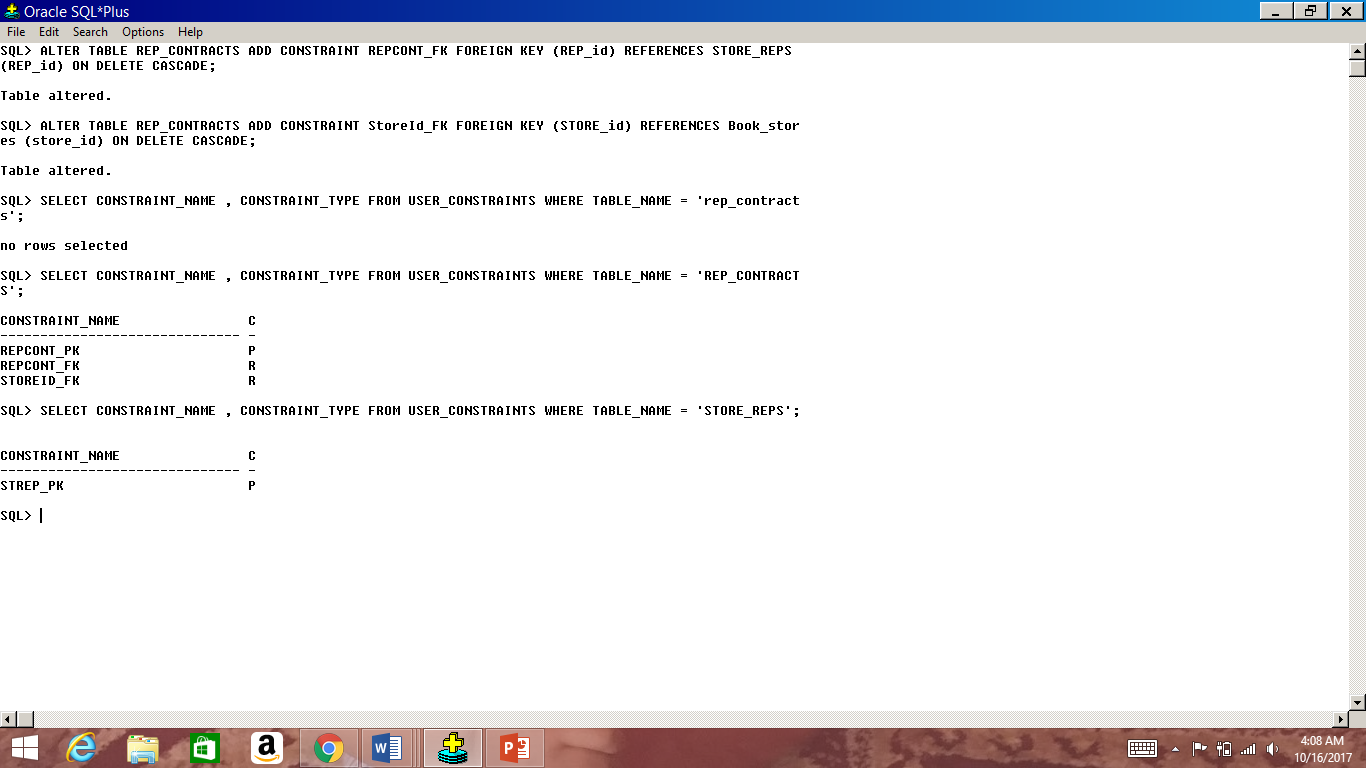
ALTER TABLE REP\_CONTRACTS ADD CONSTRAINT REPCONT\_FK FOREIGN KEY (REP\_id) REFERENCES STORE\_REPS (REP\_id) ON DELETE CASCADE;

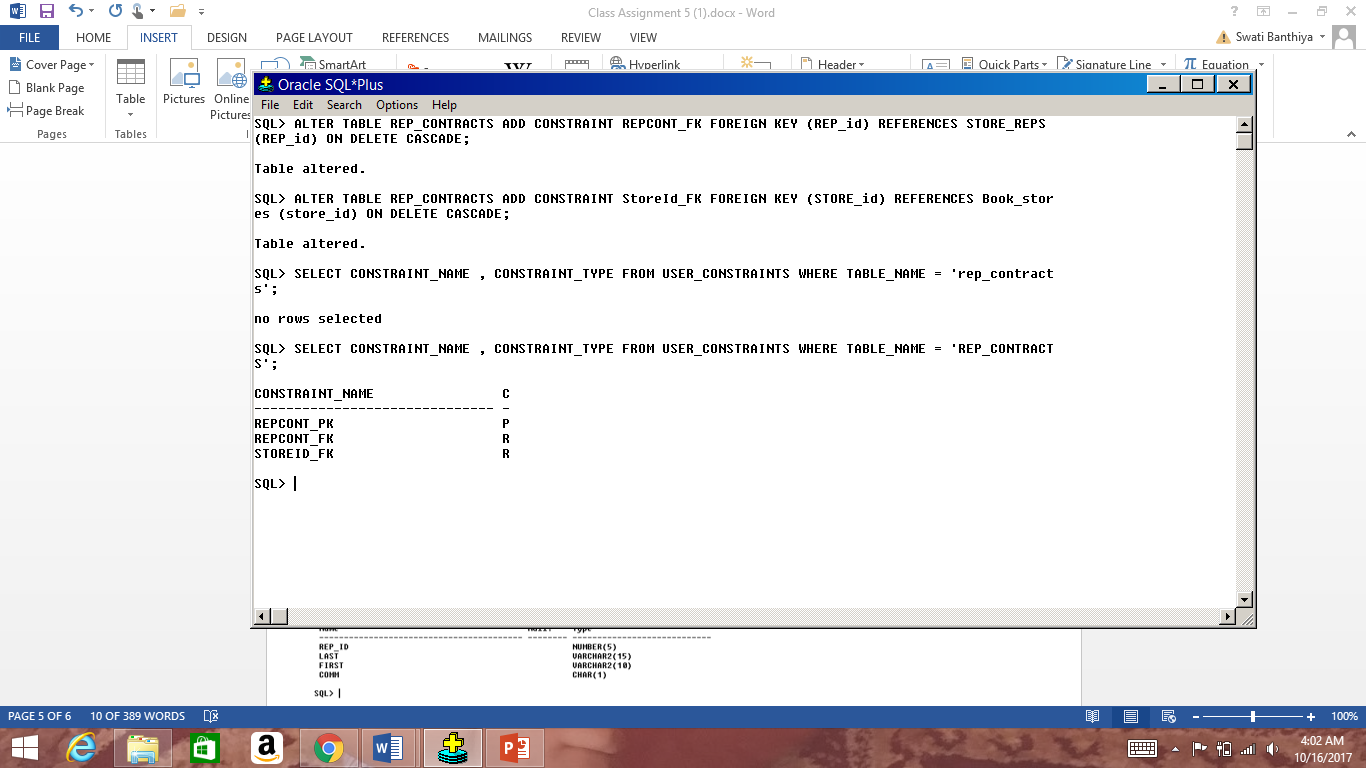
ALTER TABLE REP\_CONTRACTS ADD CONSTRAINT StoreId\_FK FOREIGN KEY (STORE\_id) REFERENCES Book\_stores (store\_id) ON DELETE CASCADE;

SELECT CONSTRAINT\_NAME , CONSTRAINT\_TYPE FROM USER\_CONSTRAINTS WHERE TABLE\_NAME = ‘REP\_CONTRACTS’;





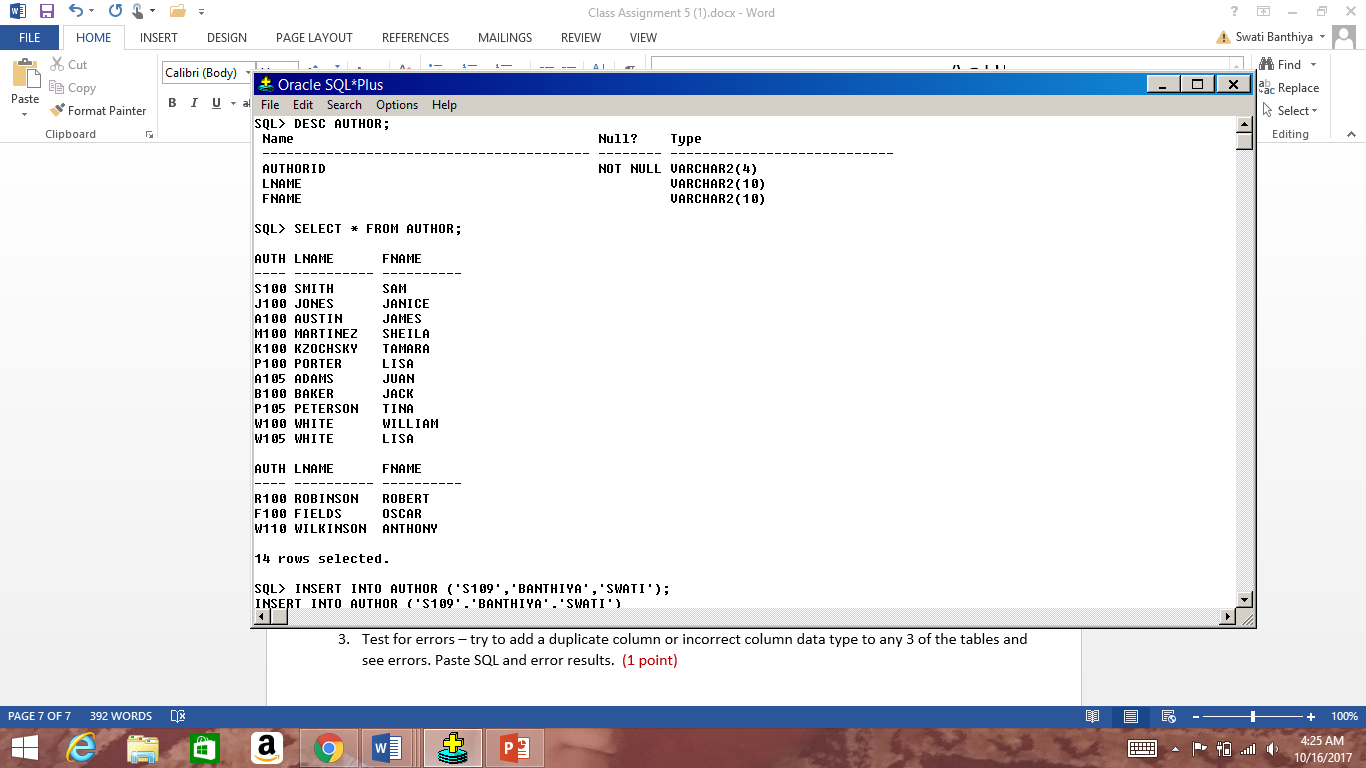




1. Add/Insert one row to any 3 of the eight tables in JustLee database (created in assignment 3). You can query each one first and see what type of data is there then add a similar data row. Paste SQL and Results. (1 point) --- EACH TABLE BEFORE ADDING ROW AND ADDING ROW SNAPSHOT IS GIVEN

TABLE 1 - INSERT INTO AUTHOR VALUES(‘S109’, ‘BANTHIYA’,’SWATI’);

BEFORE



AFTER

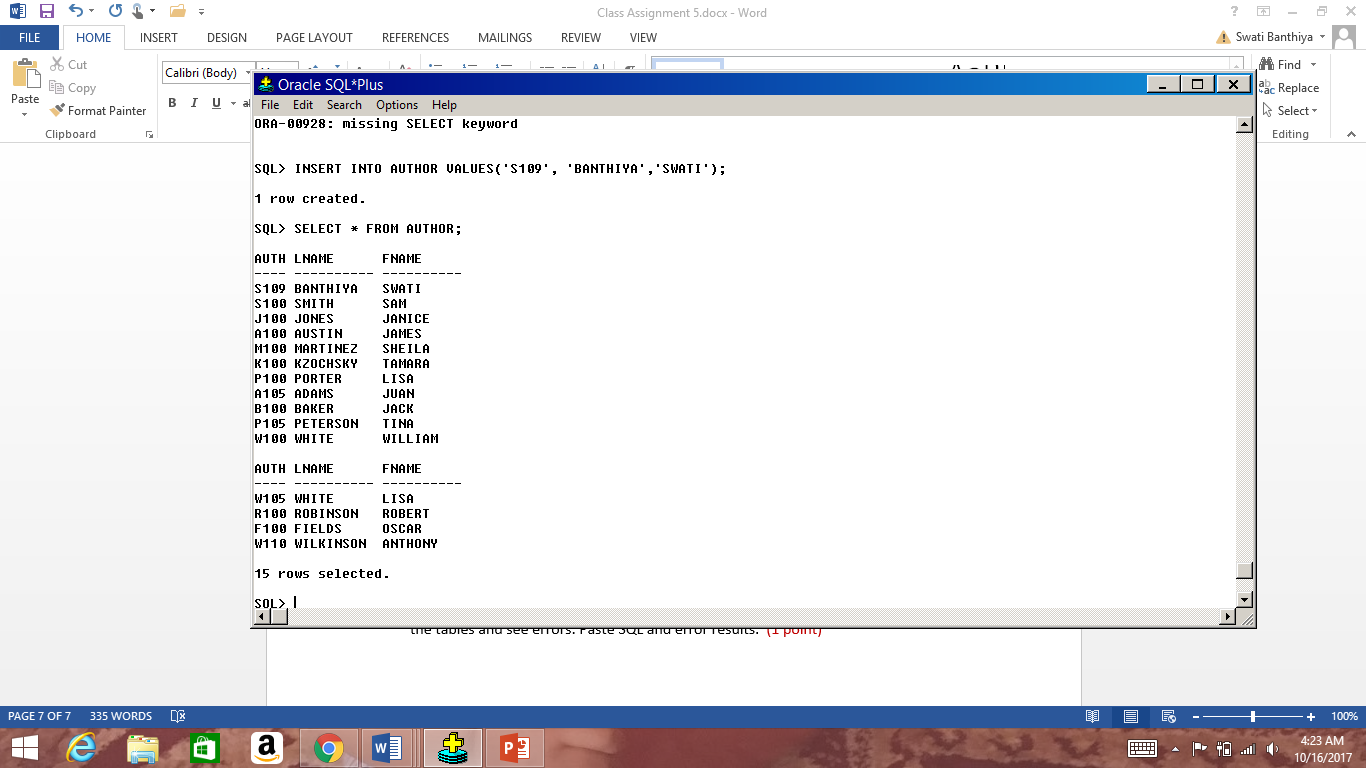
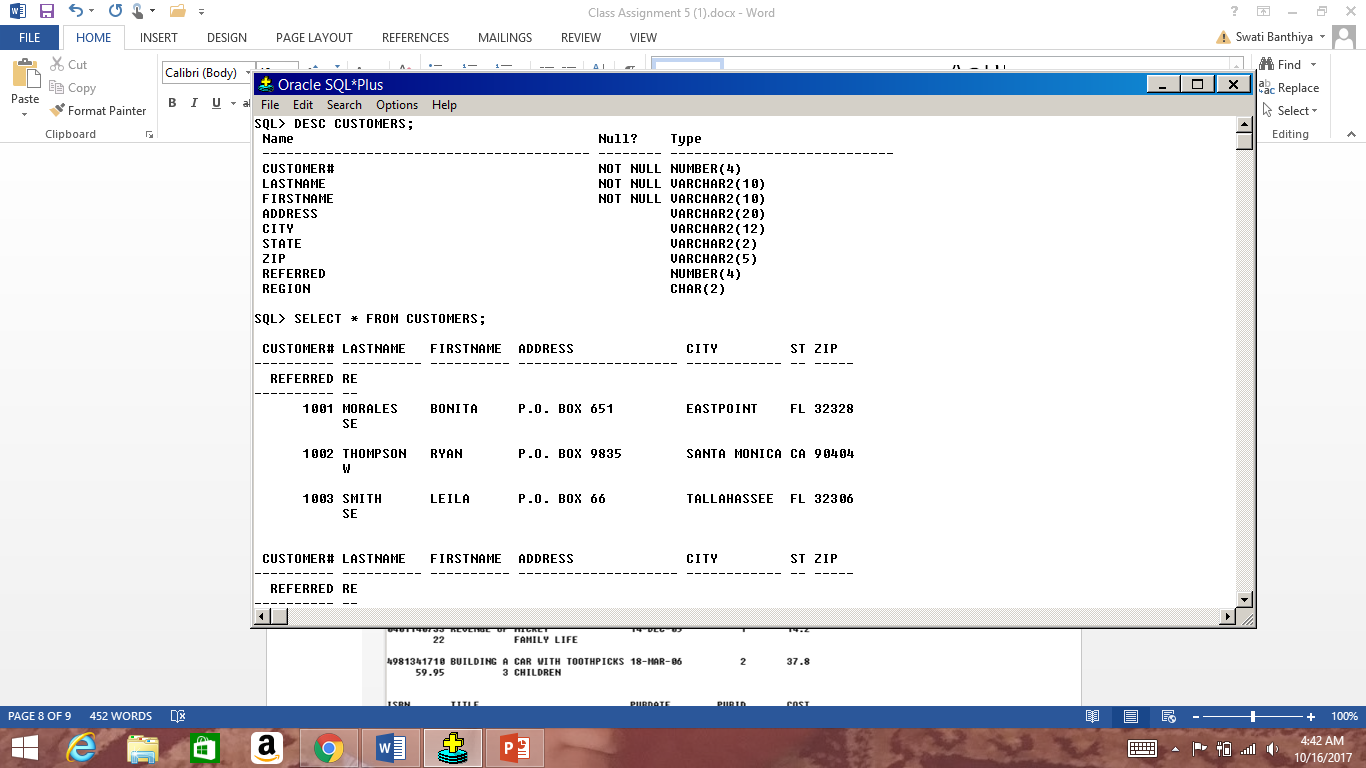


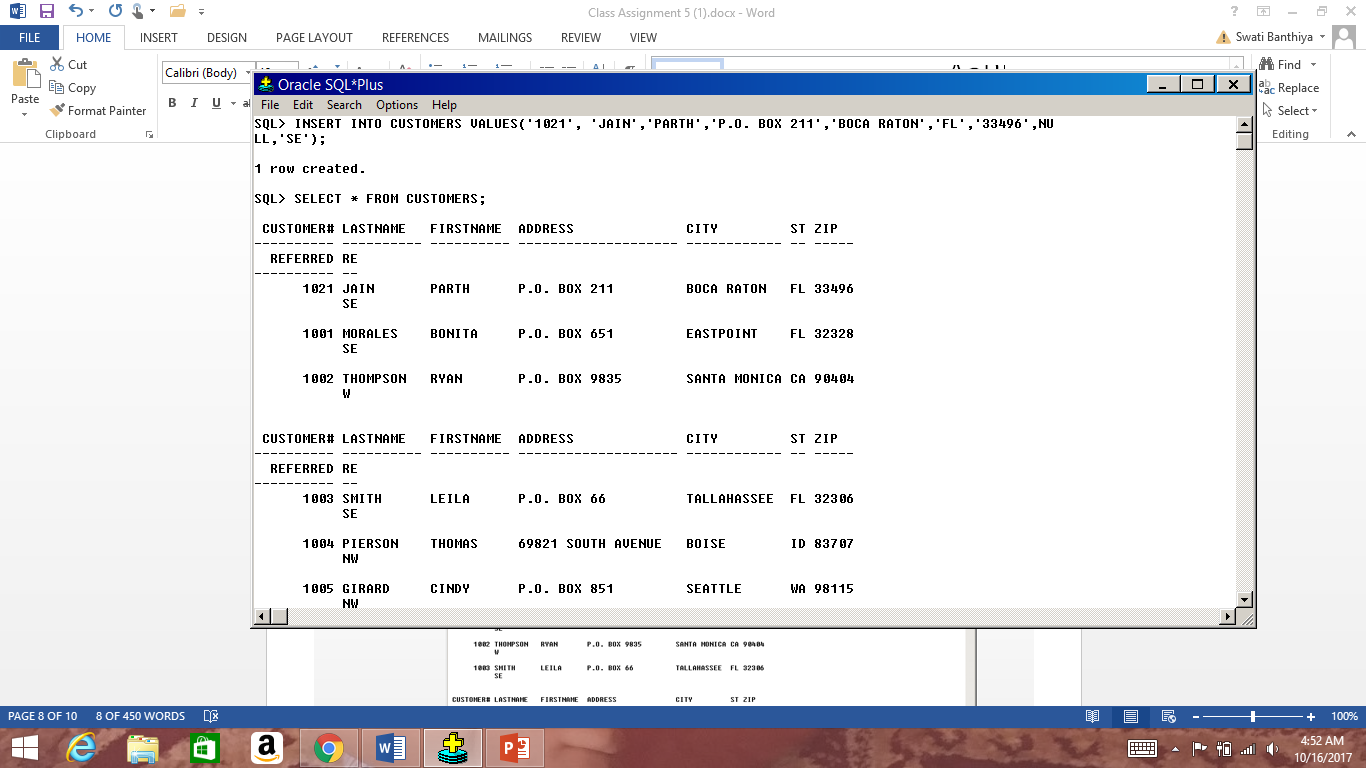
TABLE 2 - INSERT INTO CUSTOMERS VALUES(‘1021’, ‘JAIN’,’PARTH’,’P.O. BOX 211’,’BOCA RATON’,’FL’,’33496’,NULL,’SE’);

BEFORE



20 ROWS SELECTED

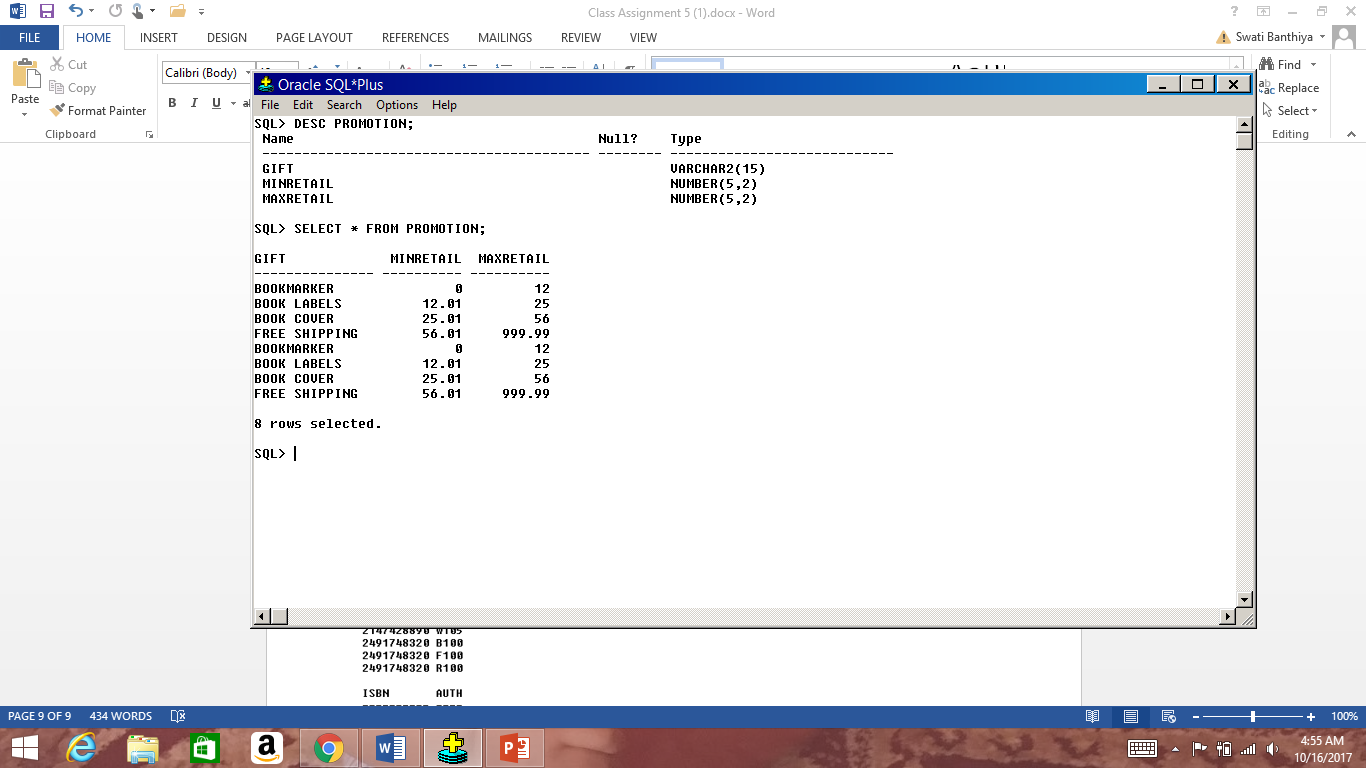
AFTER



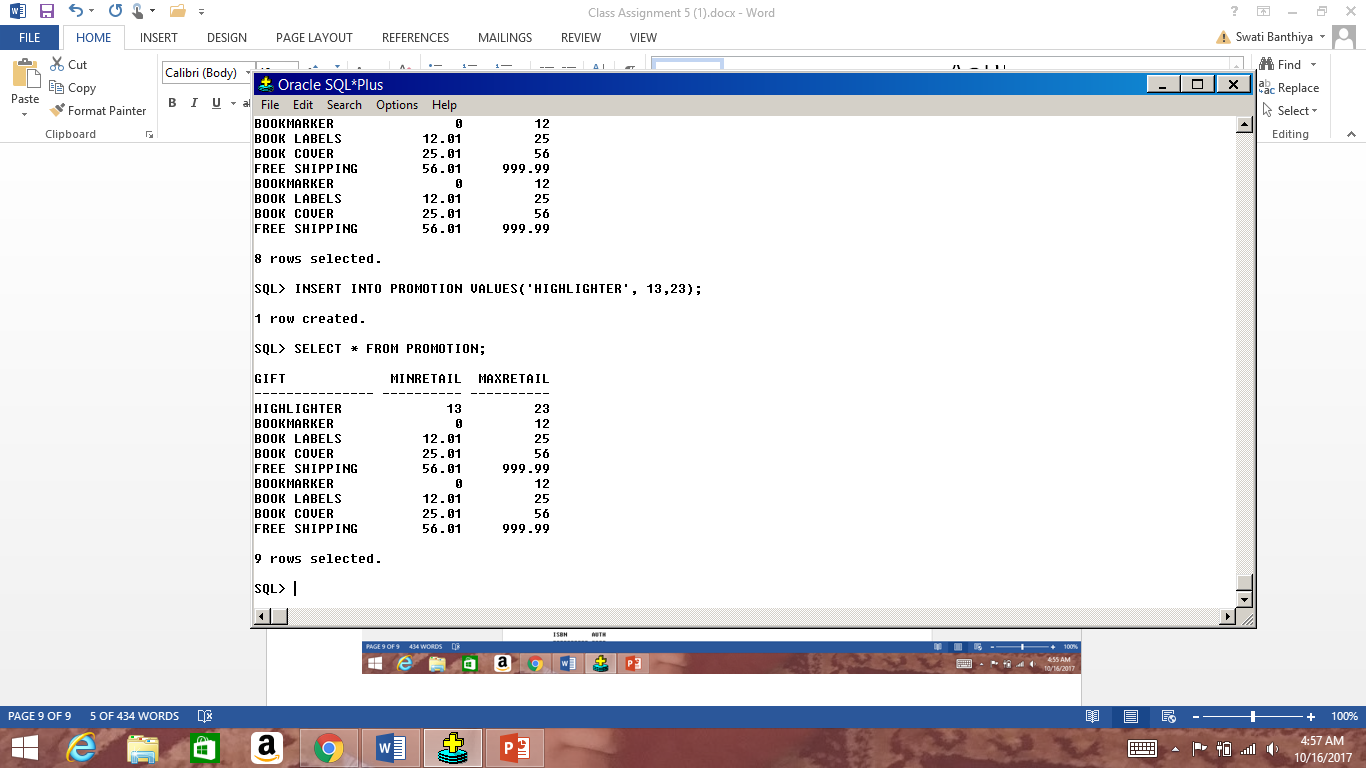
21 ROWS SELECTED

TABLE 3 - INSERT INTO PROMOTION VALUES(‘HIGHLIGHTER’, 13,23);

BEFORE



AFTER

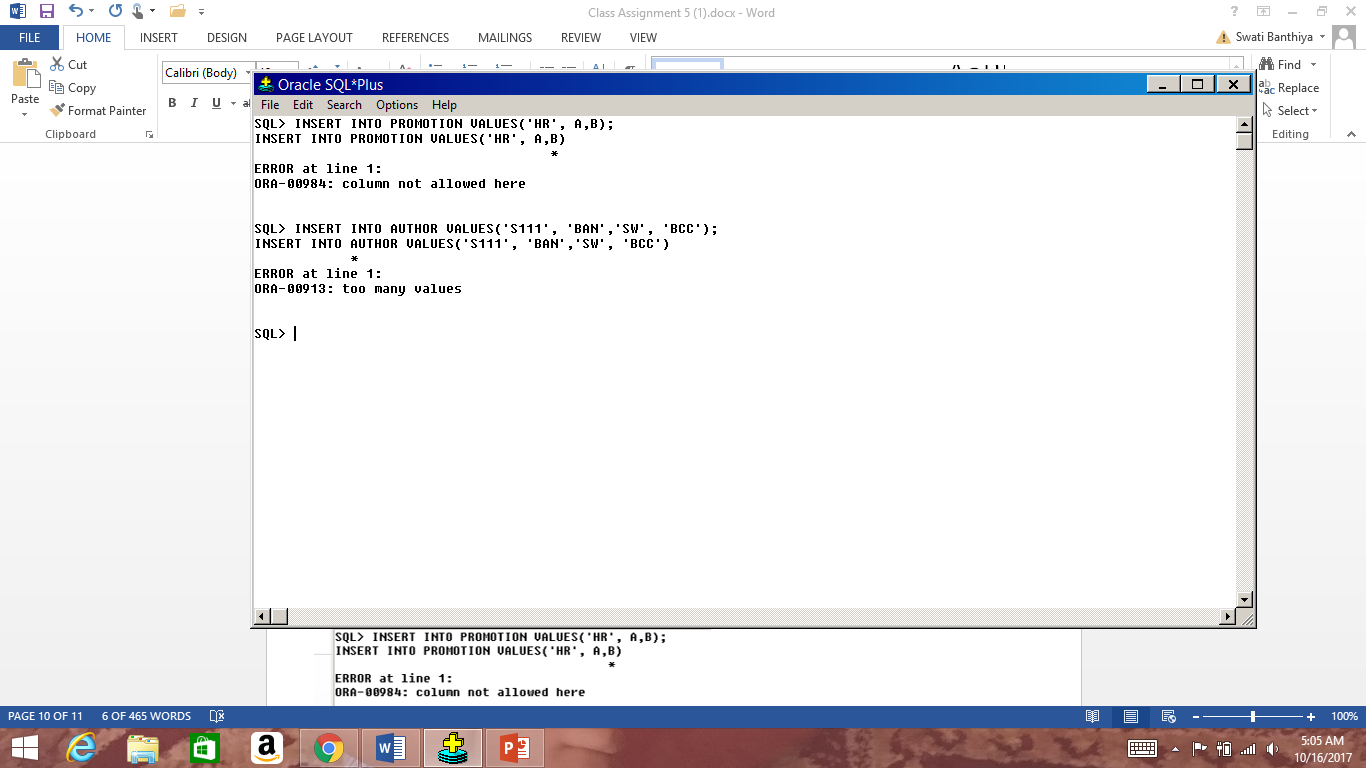


1. Test for errors – try to add a duplicate column or incorrect column data type to any 3 of the tables and see errors. Paste SQL and error results. (1 point)

**ANSWER TO QUESTION 3 (SAME TABLES USED AS IN QUESTION 2)**

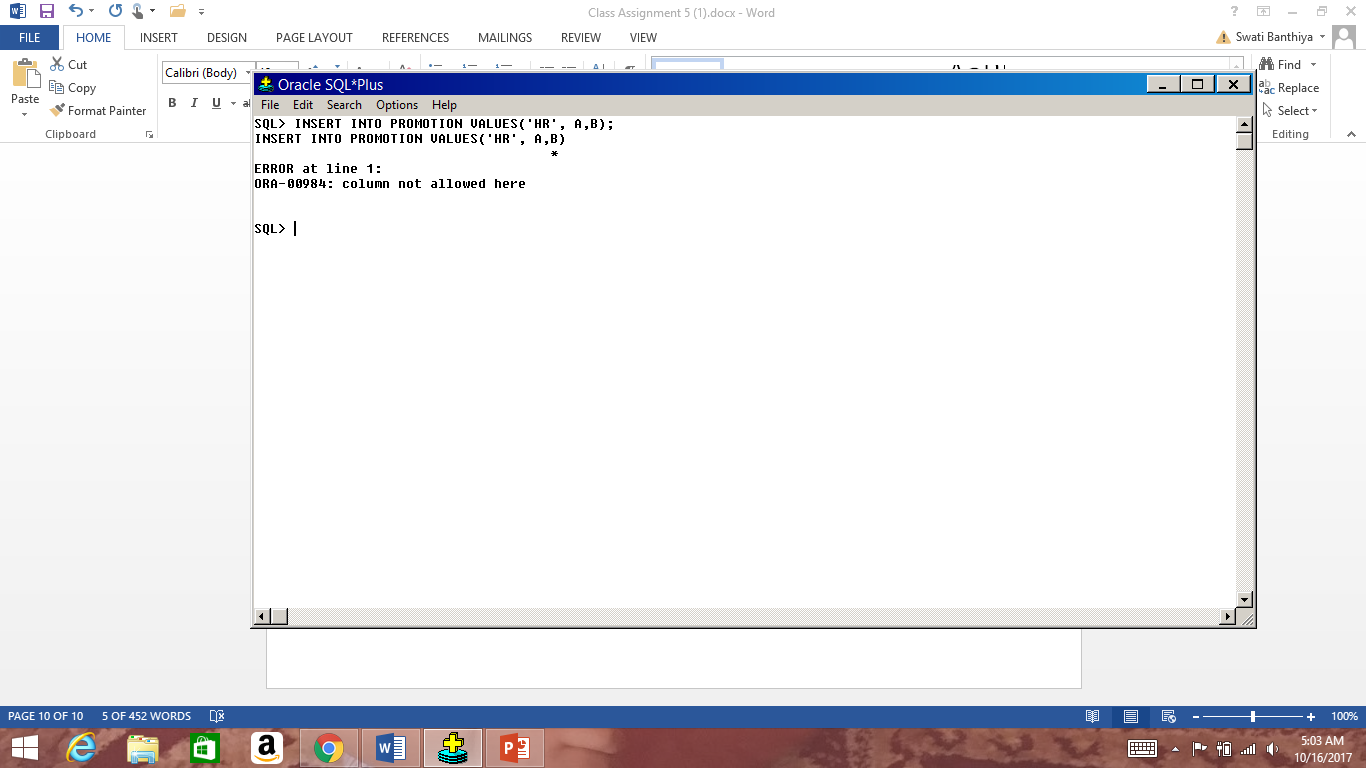
**DUPLICATE COLUMN IN AUTHOR TABLE –only 3 columns in original**

INSERT INTO AUTHOR VALUES(‘S111’, ‘BAN’,’SW’, ‘BCC’);



**INCORRECT COLUMN DATA TYPE TO PROMOTION TABLE – last 2 columns are number in original**

INSERT INTO PROMOTION VALUES(‘HR’, A,B);



**INCORRECT COLUMN DATA TYPE TO CUSTOMER TABLE – customer no is number in original**

INSERT INTO CUSTOMERS VALUES(abc, ‘JA’,’PA’,’P.O. BOX 211’,’BOCA RATON’,’FL’,’33496’,NULL,’SE’);

