DBS501, FALL 20, ASSIGNMENT TWO, due on Friday, December 04th by 9pm

e-mail the ANSWER as an ATTACHMENT, it must contain both <u>*Codes and Outputs*</u>
Your code must encompass ALL Test cases given here

1. Write the code for the Procedure called **find_stud** that will search table STUDENT and for a given Student id provide 3 Output variables and display his/her Last Name, Phone Number and Zip Code in the message form. You need to take care of the wrong input (Student id is invalid). Use BIND variables to test your Procedure (show your testing after the Code).

<u>Here are the outputs:</u>

Case1:

Student with the Id of : 110 is Martin with the phone# 718-555-5555 and who belongs to zip code 11385
PL/SQL procedure successfully completed.

LNAME
Martin

PHONE
718-555-5555

ZIP
11385

INCLUDEPICTURE "http://zenit.senecac.on.ca:5560/isqlplus/cabo/images/t.gif" * MERGEFORMATINET

INCLUDEPICTURE "http://zenit.senecac.on.ca:5560/isqlplus/cabo/images/t.gif" * MERGEFORMATINET *Case2:* **There is NO Student with the Id of : 99 PL/SQL procedure successfully completed.** **LNAME** **PHONE** **ZIP**	INCLUDEPICTURE "http://zenit.senecac.on.ca:5560/isqlplus/cabo/images/cache/c-skir.gif" * MERGEFORMATINET
INCLUDEPICTURE "http://zenit.senecac.on.ca:5560/isqlplus/cabo/images/t.gif" * MERGEFORMATINET	

INCLUDEPICTURE "http://zenit.senecac.on.ca:5560/isqlplus/cabo/images/t.gif" * MERGEFORMATINET

INCLUDEPICTURE "http://zenit.senecac.on.ca:5560/isqlplus/cabo/images/t.gif" * MERGEFORMATINET		*INCLUDEPICTURE "http://zenit.senecac.on.ca:5560/isqlplus/cabo/images/t.gif" * MERGEFORMATINET*

2) Write the code for the Procedure called **drop_stud** that will accept TWO input parameters (Student Id and Flag). Flag is either 'R' for RESTRICT or 'C' for CASCADE

(any case is allowed), with Default value of 'R'. If only Id is provided or Id with 'R' -- student removal from the database will happen, but only if he/she is NOT enrolled in any courses. If Id is provided with 'C' then student will be removed together with ALL related rows from Child and Grand Child tables. You will Count total # of rows removed in this case as well.   You also need to take care of the wrong input (Student id is invalid).   Test your Procedure (show your testing after the Code).
UNDO your removal (if happened).   Here are the outputs:

Case1:
Student with the Id of : 210 is enrolled in or more courses and his/her removal is denied.
PL/SQL procedure successfully completed.

SECTION_ID	FINAL_GRADE
147	
FIRST_NAME	**LAST_NAME**
David	**Thares**

Case2:
Student with the Id of : 410 does NOT exist. Try again.
PL/SQL procedure successfully completed.

Case3:
Student with the Id of : 310 is removed. He/she was NOT enrolled in any courses.
PL/SQL procedure successfully completed.

no rows selected
Rollback complete.

FIRST_NAME	LAST_NAME
Joseph	**Jimenes**
INCLUDEPICTURE "http://zenit.senecac.on.ca:5560/isqlplus/cabo/images/t.gif" * MERGEFORMATINET	
INCLUDEPICTURE "http://zenit.senecac.on.ca:5560/isqlplus/cabo/images/t.gif" * MERGEFORMATINET	

Case4:
Student with the Id of : 110 is removed. Total # of rows deleted is: 24
PL/SQL procedure successfully completed.

no rows selected

no rows selected
Rollback complete.

SECTION_ID	FINAL_GRADE
95	
154	
FIRST_NAME	**LAST_NAME**
Maria	Martin
INCLUDEPICTURE "http://zenit.senecac.on.ca:5560/isqlplus/cabo/images/t.gif" * MERGEFORMATINET	

3)   Write the Package specification called **manage_stud** for BOTH Procedures created so far in this assignment. Then write the Package Body specification and compile without warnings.
Then test your Package for Case 1 in the procedure **find_stud** and Case3 and Case4 in the procedure **drop_stud**.

4) Create a Boolean Function called **valid_stud** that will accept as input Student Id and will check does it exist in the table Student.
Then you will OVERLOAD your Package with other form of Procedure **find_stud** that will use this function to check its input parameter Student Id and will return only TWO Output parameters for student's First Name and Last Name. Use BIND variables to test your Procedure (show your testing after the Code).
Then recompile both your Package and its Body without errors.