Database Management Systems

PA1

Fall 2020

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CSCE 4523/5523: Database Management Systems  
Fall 2020  
Assignment One  
Due: Thursday, September 24, 2019 by 5:00 pm  
  
  
The project schema is available on class webpage.  Click on the link "Project Schema".  
  
Create the tables and add at least 10 records to each table.  You may use Part One and Part Two of Oracle notes provided on class website for help.  
  
You must use the schema EXACTLY as defined.  Otherwise, you may have to redo the first assignment later (which will not be graded again) in order to continue with the remaining assignments.  So, do it right the first time.  
  
Please use the ssh or PuTTY interface to complete this and all future assignments.  
  
Check with me if you need further clarification on any of the following tasks.  
  
  
What to turn in:  
==========================================  
  
1. Show all tables you have created.  Use the command  
        Select \* from cat;  
  
2. Show the schema of each table.  Use the command  
        desc tablename  
    Replace the word "tablename" with actual name of each table.  
  
3. Show all primary keys.  
  
4. Show all foreign key(s).  
  
5. Show other constraints (if any) on each table.  
  
6. Finally, show all records in each table.  
  
  
The queries for tasks 3, 4, and 5 are given below.  Be careful of syntax while typing them.  You may copy and paste each of the following three queries and run, rather than typing each of them.  
  
To show the primary keys:  
      select a.owner, a.table\_name, column\_name primary\_key,  
            a.constraint\_name  
      from   user\_cons\_columns a, user\_constraints b  
      where  a.constraint\_name = b.constraint\_name and  
             constraint\_type = 'P';  
  
   Note the upper case 'P' in the last line of the above command.  
  
To show the foreign keys:  
      select a.owner, a.table\_name, a.column\_name foreign\_key,  
             b.table\_name Referring\_table, b.column\_name  
             Primary\_key  
      from   user\_cons\_columns a, user\_cons\_columns b,  
             user\_constraints c  
      where  a.constraint\_name = c.constraint\_name and  
             c.r\_constraint\_name = b.constraint\_name;  
  
To show all other constraints:  
        select owner, table\_name, search\_condition from  
        user\_constraints where search\_condition is not null;  
  
  
If you have missed a constraint during table creation and want to add that or need to modify a constraint please see "Adding and Removing Constraints" section of Part Six of Oracle notes.  
  
To make the output of tasks 3, 4, and 5 look nicer, please set the following formats before executing those commands.  The formats should be set from sqlplus (i.e., after logging on to oracle).  
  
         SQL> column owner format a12  
         SQL> column table\_name format a12  
         SQL> column foreign\_key format a12  
         SQL> column primary\_key format a12  
         SQL> column referring\_table format a15  
         SQL> column search\_condition format a45  
  
  
To turn in your output, on SQL prompt, type:  
                        spool asgn1  
  
Then execute the commands for tasks 1 through 6 to display the results on screen.  Finally, type:  
                        spool off  
  
Exit from sqlplus.  Email your spool file (asgn1.lst) to bsavanth@uark.edu with Subject line "DBMS Assignment One" followed by your name.  
  
If you have problem with logging on to church, please contact Jason Crawley (jcrawley@uark.edu) for assistance.  For issues with oracle account, contact Savanth Battikadi (bsavanth@uark.edu) or me.  To access church.csce.uark.edu from off-campus, you need to use VPN.  You may find related information at:  
<https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fits.uark.edu%2Fnetwork-access%2Fvpn%2Findex.php&amp;data=02%7C01%7Cgseu%40uark.edu%7C1fb1679761fb482a396408d85c10c717%7C79c742c4e61c4fa5be89a3cb566a80d1%7C0%7C0%7C637360574567748955&amp;sdata=ZnGoSEdHe1CVqND1KIk7vuSt%2FeVFmOKRelVjtU%2BAdYg%3D&amp;reserved=0>