CSCI N311 Project 5 PL/SQL Basics (Variables and database interaction)

1. Create a table that will store a customized report that shows how many tables, views, indexes and users are in the database at a particular time (a single query against the system view sys.all\_objects will retrieve all data, but you can use other views too). Use a PL/SQL block to retrieve and insert data. When the block runs, it will retrieve a count on those objects and insert the result into your report table, along with the time that row of report is inserted.

(40’)

Result table structure will look like this (values will be different):

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Table | View | Index | User | LogTime |
| 1 | 20 | 45 | 32 | 5 | 03/31/2020 |
| 2 | 20 | 46 | 32 | 6 | 04/01/2020 |

1. Create a table that stores employee information (ID, first name, last name, email, password, salary). ID must be an integer auto generated through a sequence. Use a simple for loop to insert 500 rows of sample data, using random number generators and random string generators. All the values must be random, but satisfy certain patterns:
   1. First name and last name must be less than or equal to 10 characters long.
   2. Email must be less than 20 characters long, and must be a valid format, e.g. having a ‘@’ sign and a ‘.’ sign at the right position.
   3. Passwords must be more than 8 characters long and must contain characters and digits.
   4. Salary values must be between 0 and 100,000.

(60’)

Submit your sql file that contains your scripts to create tables and inserting data. No need to submit a WORD document.