CSC384

HomeWork 1: Due Feb 03 11:59 pm (via bb)

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Remember: you will be graded for your sincere effort, and not for correctness.

1. Write SQL DDL (Data Definition Language) statements to create a table called studentInfo with attributes studentNum of type integer, and marks of type integer. [2]

Now import the data given into your table.

The solution that you turn in **MUST** include the SQL statement to create the studentInfo table.

```sql
 1    -- Cason Konzer Database Design HW 1 2/3/2021
 2
 3    -- #1 Write SQL DDL (Data Definition Language) statements to create a table, --
 4    -- called studentInfo with attributes studentNum of type integer, and marks of type integer.
 5    -- DROP TABLE INTRO2;
 6
 7    CREATE TABLE studentInfo (
 8        studentNum int,
 9        marks int
10    );
11    -- Now import the data given into your table.
12
13
14    -- set timing on;
15
16    /*
17        #2 SELECT COUNT (*) FROM studentInfo;
18
19        #3 SELECT COUNT(*) FROM studentInfo s1, studentInfo s2
20        WHERE s1.studentNum=s2.studentNum;
21
22        #4 SELECT COUNT(*) FROM studentInfo s1
23        WHERE s1.studentNum IN (SELECT studentNum FROM studentInfo);
24
25        #5 UPDATE studentinfo SET marks = marks - 1
26        WHERE studentNum IN (SELECT studentNum FROM studentInfo);
27    */
```

```
Table STUDENTINFO created.


Table INTRO2 dropped.

Elapsed: 00:00:00.096
```

For each of the questions 2 - 5, you must show two things: (a) the result of the query; (b) the time it took to execute the query (use SET TIMING ON). [8]

2. SELECT COUNT (*) FROM studentInfo;
   (Note: you must get the result of the SQL statements in problems 2 to 4 as 19,993 – otherwise, check whether all rows were inserted correctly).

```
 COUNT(*)
----------
    19993

Elapsed: 00:00:00.027
```

3. SELECT COUNT(*) FROM studentInfo s1, studentInfo s2
   WHERE s1.studentNum=s2.studentNum;

```
  COUNT(*)
----------
     19993

Elapsed: 00:00:00.087
```

4. SELECT COUNT(*) FROM studentInfo s1
   WHERE s1.studentNum IN (SELECT studentNum FROM studentInfo);

```
  COUNT(*)
----------
    19993

Elapsed: 00:00:00.060
```

5. UPDATE studentinfo SET marks = marks - 1
   WHERE studentNum IN (SELECT studentNum FROM studentInfo);

For 5, the result of the query would be a message saying how many rows were updated. Include that message in your solution that you turn in.

```
19,993 rows updated.

Elapsed: 00:00:00.421
```

Deliverables: Could be a document in any format (.txt, .doc, …). The document should include SQL statement for Problem 1. For problems 2 – 5, there should be the result/message from the database server when you execute the statement and the time taken to execute the statement.