Practical 10 – Instructions

Study Unit 8 - Databases

Practical 10.1 – Participation Marks

PLEASE REMEMBER TO READ THE "TAKE NOTE" SECTION

Hano Strydom, the instructor for CMPG 111, has given you the "University" database containing the "CMPG111" table.

The table consists of the following columns:

Column Name	Data Type
StudentNumber	INTEGER
StudentName	TEXT
ParticipationMark	REAL
ExamMark	REAL
FinalMark	REAL

The University wants some important information regarding the module and its your responsibility to write the queries to answer the following questions:

1. Show all the students that had CMPG111.
2. Show the student name for student number 1003
3. Show all the students (StudentNumber only) that are NOT allowed to write the exam (Participation Mark below 40%)
4. Show all the students that passed the module but did not receive a distinction (Final Mark above 49% and Final Mark less than 75%)
5. Show all the students that failed the Exam (Exam Mark less than 40%)
6. Show the student number, student name and final mark and sort all the students that received distinctions for the module (Final Mark 75% and above)

TAKE NOTE:
- For Q1, Q3, Q5 use FetchAll()
- For Q2, Q4, Q6 use FetchOne()
- The Spaces for Names should be 15, and the rest 4
- **Create a variable for each queries and name it from Q1 -> Q6!**
- Submit your Python script (*.py) on CodeGrade named: Practical_10.py
- **All the commands should be in one line!**
    - **Please don't use multiline strings**

Example OUTPUT:

```
Q1 - All the Students in CMPG111:
1001, Alice Green     , 65.0, 75.0, 70.0
1002, Bob Smith       , 45.0, 33.0, 39.0
1003, Charlie Brown   , 55.0, 60.0, 57.5
1004, Diana Prince    , 90.0, 85.0, 87.5
1005, Ethan Hunt      , 40.0, 50.0, 45.0
1006, Fiona Gallagher, 72.0, 68.0, 70.0
1007, George Harris   , 60.0, 62.0, 61.0
1008, Hannah Lee      , 85.0, 78.0, 81.5
1009, Ian McKellen    , 25.0, 34.0, 29.5
1010, Jenna Ortega    , 93.0, 88.0, 90.5
1011, Kyle Brody      , 77.0, 69.0, 73.0
1012, Laura Palmer    , 82.0, 74.0, 78.0
1013, Mike Tyson      , 45.0, 50.0, 47.5
1014, Nina Williams   , 67.0, 72.0, 69.5
1015, Oscar Wilde     , 88.0, 92.0, 90.0


Q2 - Show student 1003:
Charlie Brown


Q3 - Students that are allowed to write the exam:
1009

Q4 - Students that passed without distinction:
1001, Alice Green     , 65.0, 75.0, 70.0
1003, Charlie Brown   , 55.0, 60.0, 57.5
1006, Fiona Gallagher, 72.0, 68.0, 70.0
1007, George Harris   , 60.0, 62.0, 61.0
1011, Kyle Brody      , 77.0, 69.0, 73.0
1014, Nina Williams   , 67.0, 72.0, 69.5

Q5 - Students that failed the Exam:
1002, Bob Smith       , 45.0, 33.0, 39.0
1009, Ian McKellen    , 25.0, 34.0, 29.5

Q6 - Students that received distinctions:
1012, Laura Palmer    , 78.0
1008, Hannah Lee      , 81.5
1004, Diana Prince    , 87.5
1015, Oscar Wilde     , 90.0
1010, Jenna Ortega    , 90.5
```

RUBRIC:

Description	Marks
Connect to the database	0,5
Create cursor	0,5
Q1 Correct (Created Variable)	2
Q2 Correct (Created Variable)	2
Q3 Correct (Created Variable)	2
Q4 Correct (Created Variable)	2
Q5 Correct (Created Variable)	2
Q6 Correct (Created Variable)	2
Used Fetchall () correctly for Q1, Q3, Q5	2
Used Fetchall () correctly for Q2, Q4, Q6	2
Spaces correct (15 for TEXT, 4 for the rest)	2
Commit the connection	0,5
Cloase the connection	0,5
Subtotal	**20**
Total	**100**