**COP4710 Embedded Assessment Report**

**Spring 2013**

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On April 11, 2013, embedded assessment was conducted in the class. Twenty (20) in-class students answer the five questions (Table 1) in order to check whether the learning results match with the course outcomes (Table 2).

**Table 1: Questions**

|  |
| --- |
| **Spring 2013: COP4710 Database Management**PID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. \_\_\_ The software package to facilitate the creation and maintenance of a computerized database is called
2. Data
3. Database
4. Database Management System (DBMS)
5. None of the above
6. \_\_\_ The number of **degree** of relation schema STUDENT(Name, SSN, BirthDate, Addr) is:
7. 1
8. 2
9. 3
10. 4
11. \_\_\_ For CARTESIAN PRODUCT R🡨 R1x R2, if R1 has **5** tuples and R2 has **6** tuples, then R will have how many tuples?
12. 5
13. 6
14. 11
15. 30
16. \_\_\_ How many join conditions for the following SQL query?

SELECT PNUMBER, DNUM, LNAME, BDATE, ADDRESSFROM PROJECT, DEPARTMENT, EMPLOYEEWHERE DNUM=DNUMBER AND MGRSSN=SSN AND PLOCATION=’Stafford’1. 1
2. 2
3. 3
4. 4
5. \_\_\_ Following definition belongs to which normal form?

“Disallows composite attributes, multivalued attributes, and nested relations; attributes whose values for an individual tuple are non-atomic”1. 1NF
2. 2NF
3. 3NF
4. BCNF
 |

**Table 2: Course Outcomes**

|  |
| --- |
| Course Outcomes: 1. Be exposed to information systems
2. Be familiar with database system and database architecture
3. Master the design conceptual schemas
4. Master normalization theory and the mapping of a conceptual schema to a relational schema
5. Master the expression of queries in SQL, relational algebra, and relational calculus
6. Be familiar with physical database design
7. Be familiar with writing application programs that use SQL
 |

Table 3 corresponds the questions to the course outcomes.

**Table 3: Examination Questions Corresponding to Course Outcomes**

|  |  |
| --- | --- |
| **Question** | **Course Outcomes** |
| 1 | 1, 2 |
| 2 | 3, 6 |
| 3 | 5 |
| 4 | 7 |
| 5 | 4 |

Table 4 shows the results of students’ answers to these five questions: correct answer (denoted as C) and wrong answer (denoted as W).

**Table 4: Examination Results and Performance**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student****PID** | **Question 1** | **Question 2** | **Question 3** | **Question 4** | **Question 5** | **# Correct / Total Questions** | **Correct Percentage (%)** |
|  | C | C | W | W | C | 3/5 | 60 |
|  | C | C | C | W | C | 4/5 | 80 |
|  | C | C | W | C | C | 4/5 | 80 |
|  | C | C | W | C | C | 4/5 | 80 |
|  | C | C | C | W | C | 4/5 | 80 |
|  | C | C | W | C | C | 4/5 | 80 |
|  | C | C | C | W | C | 4/5 | 80 |
|  | C | C | C | W | C | 4/5 | 80 |
|  | C | C | C | W | C | 4/5 | 80 |
|  | C | C | C | C | W | 4/5 | 80 |
|  | C | C | C | W | C | 4/5 | 80 |
|  | C | C | C | C | C | 5/5 | 100 |
|  | C | C | C | C | C | 5/5 | 100 |
|  | C | C | C | C | C | 5/5 | 100 |
|  | C | C | C | C | C | 5/5 | 100 |
|  | C | C | C | C | C  | 5/5 | 100 |
|  | C | C | C | C | C | 5/5 | 100 |
|  | C | C | C | C | C | 5/5 | 100 |
|  | C | C | C | C | C | 5/5 | 100 |
|  | C | C | C | C | C | 5/5 | 100 |

**Table 5: Examination Questions Corresponding to Learning Outcomes**

|  |  |
| --- | --- |
| **Question** | **Course Outcomes** |
| 1 | 1.1, 2.1, 3.1 |
| 2 | 4.1 |
| 3 | 3.2, 5.1 |
| 4 | 5.2, 7.1 |
| 5 | 6.1 |

**Assessment:**

From the results, it shows that the students have good course outcomes: 9 students with 100% performance, 10 students with 80% performance, and 1 student with 60% performance.

Students did very well for questions 1 and 2 (corresponding to course outcomes 1, 2, 3 and 6). Students also did well for questions 3 and 5 (corresponding to course outcomes 5 and 4). Six (6) students answered question 4 wrong. This question asked to identify how many join operation in a SQL query though this is the example discuss in the class.