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/* BuchananBrandonHW2.sql
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Programmer's Name: Brandon Buchanan
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Course: CSCI2020
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```
Section Number: 002
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```
Creation Date: 09/25/2011
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Date of Last Modification: 09/25/2011
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```
E-mail address: zbw8@goldmail.etsu.edu  
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```
Purpose -
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```
Homework 2  
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```
Notes on specifications, special algorithms, and assumptions:
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```
Designed to work on the database created by the schooldb.sql
```

```
script
```

```
*/
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```
/* 1. - List all CSCI major concentrations. This query displays the  
the results as CSCI_MAJORS. */
```

```
select MAJOR.NAME as CSCI_MAJORS  
from MAJOR  
where MAJOR.DEPARTMENT = 'CSCI';
```

```
/* 2. - List all instructors with PhDs in math or computer science. This  
query shows the full name of doctoral instructors that teach either  
math or computer science. */
```

```
select INSTRUCTOR.GIVEN_NAME, INSTRUCTOR.FAMILY_NAME  
from INSTRUCTOR  
where INSTRUCTOR.DEGREE_TITLE = 'PhD'  
and (INSTRUCTOR.DEPARTMENT = 'MATH'  
or INSTRUCTOR.DEPARTMENT = 'CSCI')  
order by INSTRUCTOR.DEPARTMENT asc;
```

```
/* 3. - List courses that are less than 3 credit hours. This query displays  
those courses and orders them by department and course ID. */
```

```
select *  
from COURSE  
where COURSE.CREDIT_HOURS < 3  
order by COURSE.DEPARTMENT, COURSE.ID asc;
```

```
/* 4. - List all courses required by CSCI 1260. This query displays the  
results as COURSES_REQUIRING_CSCI1260. */
```

```
select PREREQ.COURSE_ID as COURSES_REQUIRING_CSCI1260  
from PREREQ  
where PREREQ.PREREQ_ID = 'CSCI1260';
```

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/* 5. - Shows students who have a retake grade of 3 or more. */

```
select distinct STUDENT.ID
  from STUDENT join TAKES
    on STUDENT.ID = TAKES.STUDENT
 where TAKES.GRADE <= 3
    and TAKES.RETAKE = 'Y';
```

-5

unnecessary join
with student table

/* 6. - Shows students who have failed CSCI1100. */

```
select distinct STUDENT.ID
  from STUDENT join TAKES
    on STUDENT.ID = TAKES.STUDENT
 where TAKES.COURSE = 'CSCI1100'
    and TAKES.GRADE = 0;
```

-2

unnecessary join
with student table

/* 7. - Shows name, department, and salary of all temporary lectures. This query displays the results by most recently hired date. */

```
select INSTRUCTOR.GIVEN_NAME, INSTRUCTOR.FAMILY_NAME, INSTRUCTOR.DEPARTMENT,
       INSTRUCTOR.SALARY
  from INSTRUCTOR
 where INSTRUCTOR.ROLE = 'Temp'
    and INSTRUCTOR.TITLE = 'Lecturer'
 order by INSTRUCTOR.HIRED desc;
```

/* 8. - Shows all department chairs. This query displays the results by those who make more first. */

```
select INSTRUCTOR.FAMILY_NAME as CHAIR, INSTRUCTOR.DEPARTMENT
  from INSTRUCTOR
 where INSTRUCTOR.ROLE = 'Chair'
 order by INSTRUCTOR.SALARY asc;
```

/* 9. - List all courses taught during fall 2008 taught on either Tuesday, Thursday, or both days. */

```
select SECTION.COURSE, SECTION.CODE as SECTION, SECTION.DAYS
  from SECTION
 where SECTION.TERM = 083
    and (SECTION.DAYS = 'T'
       or SECTION.DAYS = 'R'
       or SECTION.DAYS = 'TR')
 order by SECTION.COURSE, SECTION.CODE asc;
```

/* 10. - This query displays the number of credit hours that File Processing

is. */

```
select COURSE.CREDIT_HOURS
from COURSE
where COURSE.NAME = 'File Processing';
```

