

```
/* BuchananBrandonHW3.sql
```

```
-----
Programmer's Name: Brandon Buchanan
```

```
Course: CSCI2020
```

```
Section Number: 002
```

```
Creation Date: 09/25/2011
```

```
Date of Last Modification: 09/25/2011
```

```
E-mail address: zbw8@goldmail.etsu.edu
-----
```

```
Purpose -
```

```
Homework 3
-----
```

```
Notes on specifications, special algorithms, and assumptions:
```

```
Designed to work on the database created by the schooldb.sql
```

```
script
```

```
*/
```

```
/* 1. - Display instructors, course ID, classroom, and days for courses taught
in Nicks during Fall of 07. This query displays the instructors,
while displaying a blank for null given names, for all courses taught
in Nicks during the '073' term. */
```

```
select
```

```
case
```

```
when INSTRUCTOR.GIVEN_NAME is null then ' '
```

```
when INSTRUCTOR.GIVEN_NAME is not null then INSTRUCTOR.GIVEN_NAME
```

```
end as GIVEN_NAME,
```

```
INSTRUCTOR.FAMILY_NAME, SECTION.COURSE,
```

```
SECTION.CLASSROOM, SECTION.DAYS
```

```
from INSTRUCTOR join SECTION
```

```
on INSTRUCTOR.ID = SECTION.INSTRUCTOR
```

```
where SECTION.TERM = '073' and SECTION.CLASSROOM like 'Nicks%';
```

```
/* 2. - Display all students who took a CSCI course during a fall semester.
This query displays the name of the student, the CSCI course taken,
and the year the fall course was in, based on the TERM.CODE field.. */
```

```
select STUDENT.GIVEN_NAME || ' ' || STUDENT.FAMILY_NAME || ' took ' ||
TAKES.COURSE || ' in the Fall of ' || substr(TERM.CODE,0,2) as STUDENTS
```

```
from STUDENT join TAKES
```

```
on STUDENT.ID = TAKES.STUDENT
```

```
join TERM
```

```
on TAKES.TERM = TERM.CODE
```

```
where TAKES.COURSE like 'CSCI%' and TERM.CODE like '%3'
```

```
order by STUDENT.GIVEN_NAME, STUDENT.FAMILY_NAME, TAKES.COURSE;
```

```
/* 3. - Display all departments founded more than 50 years ago. This query
list the departement older than 50 years and displays the year in
which they were founded. */
```

```
select 'The ' || DEPARTMENT.NAME || ' was founded in ' ||
```

```
extract(year from DEPARTMENT.FOUNDED) as "Depts founded 50+ years ago"
```

```
from DEPARTMENT
```

```
where extract(year from current_date) -
```

```
extract(year from DEPARTMENT.FOUNDED) > 50;
```

```
/* 4. - Displays a list of IDs and SSNs of all students from Earth. This
query displays the results in one column separated by a comma. */
```

```
select STUDENT.ID || ',' || STUDENT.SSN as "Students From Earth"
from STUDENT
where STUDENT.ADDRESS like '%Earth';
```

```
/* 5. - Display students and their grade for those who have taken a Piano
course. This query displays first and last name of students, the
name of the course, and the grade made in the course of all students
who took a Piano course. */
```

```
select STUDENT.GIVEN_NAME, STUDENT.FAMILY_NAME, COURSE.NAME, TAKES.GRADE
from STUDENT join TAKES
on STUDENT.ID = TAKES.STUDENT
join COURSE
on TAKES.COURSE = COURSE.ID
where COURSE.NAME like '%Piano%';
```

```
/* 6. - List students who took Chewbacca during 2008. This query finds those
students based on the TAKES tables and displays only the students
who had Chewbacca as an instructor in 2008. */
```

```
select distinct STUDENT.GIVEN_NAME, STUDENT.FAMILY_NAME
from STUDENT join TAKES
on STUDENT.ID = TAKES.STUDENT
join SECTION
on TAKES.COURSE = SECTION.COURSE and TAKES.SECTION = SECTION.CODE and
TAKES.TERM = SECTION.TERM
join INSTRUCTOR
on SECTION.INSTRUCTOR = INSTRUCTOR.ID
where INSTRUCTOR.FAMILY_NAME = 'Chewbacca'
and extract(year from SECTION.START_DATE) = '2008';
```

```
/* 7. - Display the total course fee for PHYS2010 when James Kirk took it.
This query displays the total course fee in dollars when James Kirk
took PHYS2010. */
```

```
select '$' || TERM.CREDIT_HOUR_FEE * COURSE.CREDIT_HOURS as "Total Course Fee"
from TERM join TAKES
on TERM.CODE = TAKES.TERM
join STUDENT
on TAKES.STUDENT = STUDENT.ID
join COURSE
on COURSE.ID = TAKES.COURSE
where TAKES.COURSE = 'PHYS2010'
```

```
and STUDENT.GIVEN_NAME = 'James'  
and STUDENT.FAMILY_NAME = 'Kirk';
```