

Assignment 2: Practice Writing Basic Queries (5 Problems)

In assignment 1, you created the various tables that will be used in the practice problems for this course. One of those tables was students. Complete the problems that follow regarding the students table.

	student_no integer	student_name character varying (20)	age integer
1	1	Michael	19
2	2	Doug	18
3	3	Samantha	21
4	4	Pete	20
5	5	Ralph	19
6	6	Arnold	22
7	7	Michael	19
8	8	Jack	19
9	9	Rand	17
10	10	Sylvia	20

Questions for this assignment

1. Write a query to display the names of those students that are between the ages of 18 and 20.
2. Write a query to display all of those students that contain the letters "ch" in their name or their name ends with the letters "nd".
3. Write a query to display the name of those students that have the letters "ae" or "ph" in their name and are NOT 19 years old.
4. Write a query that lists the names of students sorted by their age from largest to smallest.
5. Write a query that displays the names and ages of the top 4 oldest students.

ADVANCED:

Write a query that returns students based on the following criteria:

The student must not be older than age 20 if their student_no is either between 3 and 5 or their student_no is 7. Your query should also return students older than age 20 but in that case they must have a student_no that is at least 4.

Do not scroll past here without trying out the assignment yourself

Instructor Solutions for this assignment

1. Write a query to display the names of those students that are between the ages of 18 and 20.

```
SELECT student_name
FROM students
WHERE age BETWEEN 18 AND 20;
```

2. Write a query to display all of those students that contain the letters "ch" in their name or their name ends with the letters "nd".

```
SELECT *
FROM students
WHERE student_name like '%ch%'
OR student_name like '%nd';
```

3. Write a query to display the name of those students that have the letters "ae" or "ph" in their name and are NOT 19 years old.

```
SELECT student_name
FROM students
WHERE (student_name like '%ae%' OR student_name like '%ph%')
AND age != 19;
```

4. Write a query that lists the names of students sorted by their age from largest to smallest.

```
SELECT student_name
FROM students
ORDER BY age DESC;
```

5. Write a query that displays the names and ages of the top 4 oldest students.

```
SELECT student_name, age
FROM students
ORDER BY age DESC
LIMIT 4;
```

ADVANCED:

Write a query that returns students based on the following criteria:

The student must not be older than age 20 if their student_no is either between 3 and 5 or their student_no is 7. Your query should also return students older than age 20 but in that case they must have a student_no that is at least 4.

```
SELECT *
FROM students
WHERE AGE <= 20
AND ( student_no BETWEEN 3 AND 5 OR student_no = 7 )
OR (AGE > 20 AND student_no >= 4);
```