

SQL Detective Challenge

Name: _____ Date: _____

1. How many students are in the database? _____

```
SELECT COUNT(*) FROM students;
```

2. What are the different categories in the FAVORITES table? _____

```
SELECT DISTINCT category FROM favorites;
```

3. Find a student whose first name starts with 'Z': _____

```
SELECT first_name, last_name FROM students WHERE first_name LIKE 'Z%';
```

4. How many students have "Daily" as their IS_GOOD value? _____

```
SELECT COUNT(*) FROM students WHERE is_good = 'Daily';
```

5. Which student has the longest catch phrase? _____

```
SELECT first_name, last_name, catch_phrase FROM students  
ORDER BY LENGTH(catch_phrase) DESC LIMIT 1;
```

6. What's the most popular favorite color? _____ (____ students)

```
SELECT favorite, COUNT(*) as count FROM favorites  
WHERE category = 'COLOR' GROUP BY favorite ORDER BY count DESC LIMIT 1;
```

7. Find a student whose favorite color is "Puce": _____

```
SELECT s.first_name, s.last_name FROM students s  
JOIN favorites f ON s.id = f.student_id  
WHERE f.category = 'COLOR' AND f.favorite = 'Puce';
```

8. How many different colors are there in total? _____

```
SELECT COUNT(DISTINCT favorite) FROM favorites WHERE category = 'COLOR';
```

9. Which mobile phone brand appears most in favorites? _____

```
SELECT LEFT(favorite, LOCATE(' ', favorite)-1) as brand, COUNT(*) as count  
FROM favorites WHERE category = 'MOBILE_PHONE'  
GROUP BY brand ORDER BY count DESC LIMIT 1;
```

10. Find students who like both Samsung phones AND have Red as favorite color:

```
SELECT s.first_name, s.last_name FROM students s  
WHERE s.id IN (  
    SELECT student_id FROM favorites WHERE category = 'MOBILE_PHONE' AND favorite LIKE  
        'Samsung%'  
)  
AND s.id IN (  
    SELECT student_id FROM favorites WHERE category = 'COLOR' AND favorite = 'Red'  
);
```

Names: _____